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WHAT OF THE BLIND?

What of the Blind?

A SURVEY
OF THE DEVELOPMENT AND SCOPE
OF PRESENT-DAY WORK
WITH THE BLIND

Edited by
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Preface

THERE is today an increasing and widespread interest in the problems of the blind. Academic groups, social agencies, and the general public seek answers to the various questions which blindness presents. Such questions arise as "What causes blindness?" "What care should the blind child receive?" "What should be done in regard to the social adjustment of the blind adult?" and a score of others. Hitherto research workers and other students, parents of blind children, board members, and others interested in the blind have had to gather their information from various scattered sources.

What of the Blind? is designed with a view to presenting in one single volume the experience and opinions of leaders in this specialized field.

The material has been grouped so that the student may easily find the aspect of the subject in which he is especially interested. Following each chapter is a short reading list which will serve as a guide to further study.

Acknowledgments

GRATEFUL acknowledgment is made to the authors of the various papers in this volume who gave so freely of their time and professional knowledge of the subject in hand.

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"What Organizations for the Blind Can Do in Preventing Blindness" is revised from a paper read before the American Association of Workers for the Blind, Richmond, Virginia, 1933. This study was aided by a grant from the Ophthalmological Foundation, Inc.

THE EDITOR

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WHAT OF THE BLIND?

I. GENERAL SURVEY

The Blind and Resources for Their Aid

Robert B. Irwin

THERE are many points of view from which blindness may be considered. To the physician, it is a condition—absence of sight; to the social worker or the educator, it is a cause—a restriction which keeps one from full participation in the educational, employment, and recreational facilities of the community.

What Constitutes Blindness

While there are various definitions of blindness, the most widely accepted one is the following: Vision insufficient for use in the ordinary activities of life for which sight is essential. This is usually interpreted to mean in ophthalmological terms: Visual acuity of 20/200 or less in the better eye with correcting lenses, or a limitation in the field of vision so great as to constitute a handicap equivalent to the foregoing.

Visual acuity is measured by standard tests (Snellen measurements), in which the individual is asked to read lines of type in graduated sizes at a given distance. If at a distance of 20 feet he can read only the large type which a person of normal vision can read at a distance of 200 feet, he is said to have 20/200 visual acuity. It may also happen that an individual has practically normal visual acuity, but the field of vision is so restricted that he can see only a very limited area at a time and can make little practical use of his vision. A person who suffers from either of these types of visual handicap is so

limited in his choice of an occupation that from the economic point of view he is blind.

Statistics of Blindness

Unfortunately, there are no satisfactory statistics in this country from which the incidence of blindness or the characteristics of the blind population can be determined with any degree of reliability. On the basis of special studies which have been made in some states, however, it appears that the rate of blindness is from 1 to 1.5 per 1000 of the general population. The total number of blind persons in the United States at the present time is conservatively estimated to be at least 130,000. This total is much higher than that shown by the United States Census of 1930, first, because the Census Bureau's definition of blindness is somewhat restricted; and second, because many blind people are overlooked.

According to the census of 1930, the age distribution of blind people was as follows:

Age group	*Per cent*
Under 5 years (Preschool)	.8
5 to 19 years (School)	7.8
20 to 34 years (Employable but probably in need of vocational training and adjustment)	9.8
35 to 49 years (Employable)	15.0
50 to 64 years (Possibly employable, but opportunities limited by age)	22.3
65 years and over (Probably unemployable)	44.3

The group between 5 and 19 years was probably more completely reported than any other, since children in schools for the blind would be easily located by the enumerators. In contrast, the group under 5 years is probably the most incompletely reported, owing to the difficulty of locating young blind children and of determining whether or not they are blind. The large proportion of blind past 50 years of age—over 66 per cent—is to be noted; many of these would be too handicapped by age and sickness to be self-supporting even if they could see. It is important that the public should distinguish between these and the young capable blind who ask

only for opportunity. Age at losing sight is also an important consideration in the rehabilitation of the blind, and it is interesting to note that the census of 1920 showed that 65 per cent of blind people lost their sight after school age had been past.

History and Present Status of Work for the Blind

Educational Facilities.—There are in the United States 65 residential schools and 25 city day schools for the blind. The three oldest schools in the country—the New York Institute for the Education of the Blind, the Pennsylvania Institution for the Instruction of the Blind, and Perkins Institution and Massachusetts School for the Blind—were organized at about the same time, 1832. These institutions are under private management, but they have received state grants almost from the start and the states now furnish a large share of their support. The first state school for the blind was established by Ohio in 1837. Today every state either conducts a residential school of its own or has a working arrangement by which it pays the cost of educating its blind children in a similar school in a neighboring state. Approximately 5,800 pupils are enrolled in the 65 residential schools for the blind, private and public.

The first day school for the blind was organized by the City of Chicago in 1900. Since that time 24 cities have followed Chicago's lead, these schools having an approximate enrolment of 500 pupils. Special institutions of higher learning for the blind have never found much favor in the United States, but many blind men and women attend the regular colleges and universities.

Through the efforts of Dr. Newel Perry, now a teacher in the California School for the Blind, New York State in 1907 established scholarships of $300 a year to employ "readers" for blind students attending institutions of higher learning in that state. At present 29 states have similar scholarships, varying from $100 to a larger indefinite amount, the latter being limited only by the appropriation and the requirements of the

student. The American Foundation for the Blind has made available a limited number of scholarships to blind students in any part of the United States who desire to prepare themselves for specific vocations.

Workers for the blind are recognizing more and more the necessity of giving special training to the blind child before he becomes of school age, and while he is entirely under the jurisdiction of the home. Where the home environment of the preschool blind child is satisfactory, he is usually trained in the home. Some states, through the home teaching service of state commissions for the blind or bodies having similar responsibilities, make available to parents of preschool blind children special assistance in the matter of how to train such children. A few nursery schools for blind babies have been established in the United States. These are all located along the eastern seaboard. In some cases preschool blind children are placed in foster homes and their training supervised by home teachers in the employ of the state organization for the blind. Some states have passed special legislation in the interest of the preschool blind child.

The amount of vision in many cases must not be the only factor considered in determining whether a child is educationally blind. The cause of the eye condition and the effect of the type of his education on future vision must be considered. There is also a large additional group of children, whose vision is better than that given above, but who cannot read at 20 feet material which, with ordinary vision, should be read at 70 feet. Special sight saving classes must be organized for this group if they are to receive fair treatment at the hands of the school authorities. Members of this group find it difficult, if not impossible, to read ordinary print—and many who can, do so with the danger of seriously affecting that vision which remains. Books in especially large ink type have been published for the use of such classes.

Work for the Adult Blind.—Schools for blind children had not been long in operation before it became evident that the

academic and vocational training afforded in such schools did not solve the employment problem of the blind. Therefore, several employment institutions with boarding facilities were opened, some operated by the state and others privately managed but receiving more or less state support. But as the field of activities of these employment institutions was quite restricted, state commissions or departments came to be organized to care for the general needs of the blind, especially adults. Prominent among the activities conducted by most state commissions is home teaching. This work is carried on usually by blind persons who call at the homes of blind adults who have never attended schools for the blind or who need further training. Instruction is given in finger reading and in simple manual occupations, and the blind person is helped in other ways to adjust himself to his situation. In many states the home teacher fulfills the functions of social case worker as well as teacher. Other activities carried on by these state agencies are: locating the blind, finding occupations for blind people, managing workshops for blind people, furnishing home occupations, arranging for the correction of eye defects and the prevention of blindness. In some states there are workshops, trade schools, or private associations for the blind, which perform many of the functions of a state commission for the blind.

Relief for the Blind

Blindness is so definite a cause of poverty that special provision of public relief for the needy blind has long been demanded. In 1903 Illinois inaugurated special county relief for the blind. This was popularly known as a "pension." By January, 1935, there were 26 states having such special relief laws for the blind, and efforts were being made by organizations of blind people to write similar laws on the statute books of other states.

In that year a new impetus was given to the movement to make available relief for needy blind people by the passage of

the Social Security Act by the Federal Government. Title X of this act deals specifically with the problem of furnishing relief to the blind. Under the terms of this act a fund of $8,000,000 was appropriated for the fiscal year beginning July 1, 1936 for Federal reimbursement of state expenditures for monetary relief to the blind. The act provides that the sum be used for reimbursement to the states of one-half of the states' expenditures for aid to the blind (the Federal grant not exceeding $15 on behalf of any one blind person). In order to be eligible for Federal funds, a state must have in effect a state program of relief for the blind which meets the requirements set up by the Federal Social Security Board. While the Social Security Act has undoubtedly brought great benefit to the needy blind, there is a danger that too much emphasis will be placed on financial aid alone as the primary need of blind people. Workers for the blind, on the other hand, feel that monetary relief is but one phase of a general program, to be resorted to only as a temporary measure, or when all else fails. They hold that the primary objective should be the restoration of the blind to social and economic independence. This may be accomplished either by the improvement of vision through proper medical care, or, when this is impossible, through vocational training, employment, and the instruction of the adult blind in their homes, to adjust them generally to their handicap.

Literature for the Blind

Most of the literature for blind people today is printed in braille, a finger reading system consisting of raised dots, devised over one hundred years ago by a Frenchman, Louis Braille. A few of the older blind persons still use a system called New York Point, which is one of the scores of types developed for the blind during the century following Braille's invention. Braille is the only system now taught in schools for the blind. For those blinded in later life who find it difficult to learn to

read braille, a simple system of raised lines called Moon type has been invented.

Owing to the limited market for books for the blind, their publication has never been commercially profitable. Finger readers have, therefore, had to depend either upon philanthropy or upon public funds for their reading matter. School books for more than half a century have been largely supplied by the Federal Government, operating through the American Printing House for the Blind in Louisville, Kentucky. Because of the great cost and bulk of books in raised type, few blind people own them and not many communities have felt justified in establishing libraries for the blind. Because of this dearth of braille literature for the adult blind reader, the Pratt-Smoot Law was passed by Congress in 1931. Through this law $100,000 is made available annually to the Library of Congress for the purchase of books in embossed print for the use of adult blind readers. The books are printed for the Library of Congress by private braille printing presses, and forwarded to 27 depository libraries designated by the Library of Congress, where they may be borrowed by blind readers without charge. To facilitate circulation, such literature is carried through the mails free of charge.

Many magazines of a secular or religious nature are now printed in embossed type for the use of blind readers. In 1907, Mrs. Matilda Ziegler of New York established the *Matilda Ziegler Magazine for the Blind*, a monthly periodical printed in braille, New York Point, and Moon type. Upon application this is sent free to any sightless person in the United States or Canada. The American Foundation for the Blind publishes two professional magazines, the *Outlook for the Blind*, devoted to work for the blind in general, and *The Teachers Forum for Instructors of Blind Children*.

A very small proportion of blind people who lose their sight after reaching mature years ever learn to read with their fingers without conscious effort. Some of those losing their sight in childhood never become facile touch readers. It is estimated that less than 25 per cent of the blind population

can make any practical use of braille books. To fill this gap the American Foundation for the Blind developed the Talking Book. Books are recorded on long-playing phonograph records, and are played on specially designed machines resembling an ordinary portable phonograph. In 1937 the Pratt-Smoot Law was amended authorizing an increase in the appropriation to $175,000 annually for the purchase of Talking Book records. This amount is in addition to the $100,000 authorized for books in raised type. These records are manufactured by the American Foundation for the Blind and the American Printing House for the Blind and supplied to the Library of Congress at cost. They are loaned to blind people in the same way as braille books. The Talking Book machines may be purchased at cost of manufacture from the American Foundation for the Blind, or when a blind person cannot afford to buy one, Government-owned machines may be borrowed from state commissions for the blind or other state agencies.

Vocational Opportunities

Workers for the blind find that perhaps their chief task is finding remunerative employment for their clients. The employment field is narrowed not only by the limitations imposed by blindness, but also by the lack of confidence on the part of the seeing public in the productive powers of the blind. Employed blind people may be divided into four classes: first, those who have set themselves up in business or in professions; second, those who are employed side by side with the seeing in factories and commercial establishments; third, those who cannot compete in regular business or industry but are employable under favorable conditions such as are provided in sheltered workshops; and fourth, those working in their own homes under the supervision of a central agency for the blind. To the blind man with some business acumen, a commercial enterprise usually affords the best opportunity for success. These enterprises represent almost every line of business, from the management of a peanut stand to the presidency of a

bank. A large number of blind people are successfully engaged in operating news and refreshment stands. The Federal Government has recently enacted legislation by which blind people are allowed to operate stands in Federal buildings under the supervision of the Vocational Rehabilitation Division of the United States Office of Education. This will materially increase the vocational opportunities of blind people in this field.

Wherever salesmanship, personality, or executive ability is of first importance, there are to be found blind men in positions of trust. Most blind people, however, like their seeing brothers, must be wage-earners, leaving management to those with special abilities.

Until the beginning of the present century the blind man who had found work as an ordinary factory hand was rare indeed. About 1907, however, Charles F. F. Campbell, an enthusiastic young worker for the blind in Massachusetts, became convinced that there were more jobs in industry which blind people could fill than there were blind people to fill them. He demonstrated his contention to a limited extent, but the employment of blind people in industry did not become widespread until the years of the World War, and most of the blind who obtained positions at that time lost them during the industrial recession about 1921. Owing to the rapid development of labor-saving machinery, to the restricting effect of insurance regulations, to the depression beginning in 1929, and to the increasing difficulty, for various reasons, of inducing industry to assume responsibility for the employment of the handicapped, the number of blind people now working in factories is but small compared with that of those so engaged at the close of the World War.

In most large cities may be found one or two small sheltered workshops employing a dozen or more men. These shops usually operate at a loss, and the deficit is made up through either private philanthropy or taxation. The commonest activities carried on are chair-caning and the manufacture of brooms, mops, rugs, and reed ware. Because blindness handi-

caps individual workers in varying degrees, wages are usually paid by piece rate.

Many state commissions and city associations arrange to sell products made by the blind in their homes. In some cases the organization supplies the materials and pays for the labor upon the delivery of the completed work. In other instances the workers furnish their own materials and the organization sells the finished articles, remitting the amount of the purchase price to the blind workers. There is usually no charge for selling service. In a few instances organizations for the blind in several states unite in presenting articles which the blind have made to the buying public through one selling agency which maintains several salesmen in the field and charges a small commission on each sale for this service. Articles manufactured by the blind in home industries include dish towels, aprons, rugs, baskets, hand-woven fabrics, crocheted and knitted wear, and stuffed toys.

Because of the desire of the average person to help blind people, and due to lack of information as to bona fide organizations, the fraudulent sale of articles purported to be made by the blind by unprincipled business men is a constant threat to the market of approved organizations. When buying articles represented as having been made by the blind, purchasers should make sure they are really buying such products by inquiring of their own local or state organization for the blind. Commodities made by the blind are usually the equal in quality and price of similar articles made by the seeing. Purchasers may, therefore, provide employment to blind workmen without paying an exorbitant price for blind-made wares.

The Multiple Handicapped

The problem of the education, training, and rehabilitation of blind persons is made much more difficult when other handicaps besides blindness are present. The blind child who is also feeble-minded is usually placed in an institution for the feeble-minded rather than in a school for the blind, on the theory

that lack of mental ability is a much greater handicap than blindness and the child should be placed in that institution best fitted to cope with the major handicap.

For many years the deaf-blind child was sent to a school for the deaf or to a school for the blind for his education. With the development of the deaf-blind departments at Perkins Institution and at the New York Institute laboratories for training teachers of deaf-blind children have been made available. In educating deaf-blind children, one teacher can train only a limited number, thus raising the per-pupil cost. In view of this fact, special appropriations for the instruction of the deaf-blind have been made by some states.

International Aspects

International co-operation in work for the blind received a decided impetus in 1931 when a World Conference on Work for the Blind, sponsored by the American Foundation for the Blind and other organizations, was held in New York City. Representatives of thirty-seven nations attended this conference, and were mutually benefited by the resulting exchange of ideas. Among the results traceable to this conference are the present uniform braille system adopted in 1932 by English-speaking countries, and the establishment of the International Clearing House conducted by the Foundation to enable each publisher of braille, Moon type or Talking Books to avoid duplicating titles already published for the blind by another concern in the United States or the British Empire.

American Foundation for the Blind

The American Foundation for the Blind was incorporated in 1921 as a national agency. The purposes of this organization are to collect and disseminate information regarding all phases of work for the blind; to promote state and federal legislation in behalf of those without sight; to arrange for

the establishment of needed agencies for the blind throughout the country; to promote the training and placement of well-qualified, professional workers for the blind; to develop mechanical appliances for the blind, such as the braille typewriter and the Talking Book; and to assist in increasing the efficiency of work for the blind in all particulars. The Foundation is supported in part by income from endowment, but largely by annual contributions from individuals interested in the blind.

National Associations

There are two other national associations composed largely of persons engaged in work for the blind: the American Association of Instructors of the Blind, composed of superintendents, teachers, and board members of schools for the blind, and librarians of libraries for the blind; and the American Association of Workers for the Blind, in which anyone interested in the blind is eligible for membership. The primary purpose of these two organizations is to promote the discussion of problems of mutual interest through biennial national conventions of their members held in alternate years.

Compensating Privileges Given to Blind People

To offset the disadvantages of lack of sight, blind people have been granted certain special privileges, some of a national and others of a local nature.

Special Fare Concession on Railroads, Buses, and Steamships.— Arrangements have been made by the American Foundation for the Blind through which a blind person and a seeing attendant may ride for one fare on most of the railroads in the United States. Certain bus lines grant a similar concession. A blind person and a seeing attendant may travel on the trans-Atlantic steamships for one and one-half fares. Application

for information as to how these concessions can be obtained should be made to the Foundation.

Special Discounts.—Special discounts to blind people may be obtained through the American Foundation for the Blind on the following articles: white canes, watches especially designed for the use of blind people, radios, phonograph records, and braillewriters. Talking Books and Talking Book machines are sold at the cost of manufacture to blind people only. Inkprint typewriters may be obtained at a substantial discount through the *Matilda Ziegler Magazine*, Monsey, New York. Discounts on other items are often obtained in individual cities and states by local and state organizations for the blind.

Games and Appliances.—Many games, such as checkers, chess, dominoes, and various card games have been adapted to the use of the blind. They are manufactured in this country by the Howe Memorial Press, Boston, Mass., and in England by the National Institute for the Blind, London. Special appliances, such as writing boards, slates, etc. are also made by the American Printing House for the Blind in addition to the above-mentioned organizations. Some of the games and appliances made by the National Institute for the Blind in England are sold at cost by the American Foundation for the Blind.

Voting Privilege.—Nearly every state has passed laws granting special assistance to blind voters at the polls. In the majority of states an election officer from each of the two major parties accompanies the blind voter to the voting booth. A preferred method has been adopted in a few states by which the blind voter may designate a friend or a member of his immediate family to accompany him into the booth without the intervention of an election official.

Miscellaneous Privileges.—Other compensating privileges are: legislation allowing free entry of imported material of an

educational nature for the use of institutions for the blind, the granting of free tickets to blind people by theaters in many local communities, and special postal rates for braille correspondence, magazines, books, and Talking Book records. In many communities blind persons are given the exclusive privilege of carrying white canes in order that when crossing thoroughfares they may be easily recognized by motorists.

What Organizations for the Blind Can Do in Preventing Blindness

Conrad Berens, M.D.

MORE than fifty years ago a distinguished authority said that one-third of all blindness should have been prevented, one-third might have been prevented, and only one-third was inevitable. Statistics obtained from the British Isles only seventeen years ago form the basis for a similar statement made by Mr. Bishop Harman, of London. Recent data compiled by the Committee on Statistics of the Blind on the causes of blindness justify the statement that probably not more than 25 per cent of blindness is inevitable.

When we consider that the first active effort to work with the blind was instituted approximately 150 years ago, we can but admire its remarkable development. Organizations for improving the conditions of the blind were obliged first to undertake work of the most urgent nature, and the importance of their contribution in providing opportunity, care, education, training, and means of existence for those handicapped by loss of sight cannot be overemphasized.

It is encouraging that in some instances associations which work with the blind are also sponsoring activities for the prevention of blindness. In this paper, a few of the activities which may be of value in preventing blindness will be considered in relation to organizations for the blind. As knowledge of the causes of blindness increases, efforts to help the blind must be accompanied by efforts to eliminate the factors responsible for blindness.

The program for prevention of blindness as stated in the objects of the National Society for the Prevention of Blindness is:

1. To endeavor to ascertain, through study and investigation, any causes, whether direct or indirect, which may result in blindness or impaired vision.
2. To advocate measures which shall lead to the elimination of such causes.
3. To disseminate knowledge concerning all matters pertaining to the care and use of the eyes.

It is apparent that this program involves a co-operative relationship with agencies in various fields which have some contribution to make. Certain agencies caring for the blind have instituted measures which have prevented much unnecessary blindness and which have restored sight to many who had been considered permanently blind. It would seem that all organizations dealing with the blind have the following responsibilities:

1. To provide an eye examination and diagnosis by a competent eye physician as one of the first steps in procedure with a blind client.

If the patient has been under the care of an ophthalmologist, a re-examination may not be necessary, but in such case the agency should consult the ophthalmologist immediately and secure as full a report as he is able to give. Other exceptions to the general routine will be found; for example, the very aged or feeble, those who have had both eyes enucleated, and those who live in isolated districts where no physician is available. Nevertheless, it will be found that in most cases an examination can be arranged, and it should therefore be established as a routine procedure to be departed from only when justified by exceptional circumstances.

Certain agencies may feel that routine eye examinations are impractical because of the expense involved. It may be that they have no funds to pay for such examinations, that

their clients are unable to pay for the services of a private physician, or that no ophthalmologist is available. In such situations, an effort should be made to secure the co-operation of the county medical society or some similar body, in making the necessary eye service available. Lions Clubs or other volunteer groups are usually willing to defray the necessary expenses of travel, etc., and eye physicians will give their services without charge when they understand the serious need.

2. To assist in the restoration of sight, whenever this is possible. Blindness from certain causes will often yield to treatment or operation, e.g., cataract, etc. In other cases, when vision has not been entirely destroyed, the progress of the disease may be arrested and sometimes an improvement in vision effected, e.g., keratitis, glaucoma, etc. Ophthalmological care may be made available through arrangement with existing clinics or private physicians or through a clinic supported directly by the agency for the blind.

3. To keep statistics on blindness in accordance with standard procedure.

It is unfortunately true that there are in this country, and practically speaking, in the world, no reliable data as to the prevalence of the various causes of blindness. Such studies as have been made include only limited areas, and, because there has been little uniformity in classifying the data, it is impossible to combine them into statistics representative of larger groups. Consequently, we have no authentic statistical data on which to base campaigns for the prevention of blindness, nor can we measure with any accuracy the progress made in prevention.

Organizations for the blind are in the best position to record and assemble these data. The routine eye examination by a competent ophthalmologist, to which reference has been made, will furnish the necessary facts for the compilation of summaries. A record form for eye examinations and a scheme for classifying causes of blindness are available

through the Committee on Statistics of the Blind, which is sponsored jointly by the National Society for the Prevention of Blindness and the American Foundation for the Blind. Every agency for the blind is urged to make a contribution to our knowledge of blindness and our activities for its prevention by following the procedures recommended by this Committee in assembling data on blindness among its clients.

4. To establish a co-operative relationship with all agencies in its territory concerned with the prevention of blindness. This will facilitate reference to the appropriate agency of those problems which belong in its field. For example, a school for the blind may be instrumental in calling to the attention of the educational authorities their responsibility for providing special educational facilities for partially sighted children.

The Rôle of Ophthalmology and the Medical Sciences

It cannot be over-emphasized that only a physician who has made a special study of diseases of the eye can diagnose the condition accurately and estimate the possibilities for improvement or cure. The lay worker, however long his experience, does not have the necessary knowledge or skill and should not assume this responsibility. Until the opinion of a competent ophthalmologist has been obtained, the agency for the blind should not take it for granted that the new client is necessarily permanently blind. The importance of this statement was vividly illustrated recently in a study of the causes of blindness. The examination of data from several schools for the blind disclosed the fact that vision in many cases was so good that even without operation or special treatment these children should not have been considered candidates for a school for the blind. Others needed only correction of visual defects or operation to enable them to compete successfully with children in the regular classes.

To cite a particular example, a survey of the West Virginia

School for the Blind, with an enrolment of 114 pupils, indicated that surgery might be helpful to 27. The necessary operations were performed without charge by an ophthalmologist and the Lions Clubs of the entire state paid the costs of transportation and hospitalization. As a result, 9 of the 27 children entered public school with normal sight; 16 received vision ranging in degree from 20/50 to 20/200; and only 2 were not benefited.

At the time of the survey of schools for the blind which was made by one of the subcommittees of the White House Conference on Child Health and Protection it was found that in 44 schools, having a total enrolment of 4,195, there were 673 students (16 per cent) having sufficient vision to permit their reading inkprint. It seems unnecessary to recount the advantages to children of being transferred to sight saving classes rather than being classified as blind.

It is likewise true that men and women, after having been classified as blind, have been thoroughly examined by an eye physician who found that vision could be improved to such a degree that many of them could be self-supporting in occupations requiring sight. Statistics from the Lighthouse Eye Clinic of the New York Association for the Blind show that, over a period of seven months, 50 patients reported to be blind were transferred from the classification of blind to that of seeing. The summary follows: The vision of 18 patients was restored to normal by means of glasses; the vision of 23 was improved by glasses; 4 were improved by treatment; and operation improved the vision of 5. Previous to their reclassification, a number of these patients had received financial aid and subsidized employment.

The records of the Lighthouse Eye Clinic of New York City furnish the following case report: E. F., aged 65, formerly a waiter in a restaurant. Cataracts developed in both eyes twenty years ago. The left eye was operated on immediately. Post-operative complications resulted in loss of vision. At that time and at subsequent observations he was advised

not to have the right eye operated upon. After the patient was examined at the Lighthouse Eye Clinic, the symptoms in the eye previously operated upon were diagnosed as arising from a focus of infection. Following treatment, an operation was performed on the right eye. His vision is now 20/15 in the right eye.

A case recently reported was that of a woman who, for nine years, had been considered blind and had been receiving social service and subsidized employment from an agency for the blind. When an eye examination was arranged, it was found that, fitted with the proper glasses, she had practically normal sight.

Recently, the North Carolina State Commission for the Blind instituted a "preventorium" at the school for the blind. The ages of the patients attending the clinics ranged from 2 to 85 years, and the duration of blindness ranged from a few months to 20 years. Of the 289 examined, 94 were admitted to the hospital for operation or treatment. In a few cases the operation was to relieve pain or to prevent further loss of sight, but in most cases to restore sight; 108 operations were performed with excellent results. Of the 195 examined, but not admitted to the preventorium, 41 could not be benefited by medical aid, although more than half of them would not have lost their sight, could they have received this aid earlier.

These are only a few instances of the saving of money and effort, to say nothing of increased personal happiness, which may be achieved through the routine eye examination.

Another way in which sight is being salvaged is through the increasing tendency for states to incorporate in their Blind Assistance programs provision for remedial operations for individuals who might otherwise remain blind.

When the client still retains a certain degree of vision, it is important to know what the visual acuity is and in which activities he may safely engage without jeopardizing that sight. In this, the opinion of the eye physician is essential.

Causes of Blindness

The value of the contribution which an agency dealing with the blind can make is increased when there is appreciation of the nature of various causes of blindness and the possibilities for their correction or prevention.

Cataract.—In a report made by the Prevention of Blindness Committee in England in 1938 it was shown that cataract was the most prevalent cause of blindness (24.97 per cent). A tabulation as to whether the cases were "inoperable," "doubtfully operable" or "operable but inadvisable" revealed that there were a further 345 operable cases. These figures suggest that if it had been possible to make examinations at an earlier date, operation probably would have restored the vision of many patients.

Statistics from the residential and day schools for the blind in the United States show that 12.5 per cent of the 2,676 pupils in these schools (1935-36) are blind as a result of congenital cataract. Newmayer records the interesting case of a family of five children, three of whom had congenital cataracts of both eyes. Following operation, the vision of the two older ones, aged 12 and 14 years, was 15/100 in each eye. The youngest child, three years old, has not yet been operated upon.

Many cataracts result from injuries, either blows on the eyes or penetrating injuries, and naturally many of the cataracts of this type are preventable. Incipient senile cataract develops in people past middle age, but it is probable that age is not the most important factor in the production of the cataract. We are beginning to realize that the patient's general condition plays an important part in the cause of cataract. For a long time we have been impressed with the close relationship that exists between chronic infection and cataract. Often one sees a slowly developing cataract associated with a chronic sinus infection. We are being forced

to the conclusion that the majority of cataracts, whether in children or adults, have a cause, even if we are unable to find it in each instance. However, we must make every effort to find that cause, whether it be in the nose or throat, sinuses, teeth, intestinal tract, blood (example: diabetic cataract), glandular system, or owing to a congenital or hereditary defect. Several years ago, in a certain hospital in a large city, every patient with a cataract was operated upon as soon as possible. No thorough general examination of the patient was made. At present, in most hospitals, careful general studies, including Wassermann tests, urinalysis, and blood chemistry, are usually made before operation is advised.

Finally, a brief word on the treatment of cataract—once the cataract has become established, it cannot be dissolved. It consists of degenerated lens fibers enclosed by the lens capsule. In the incipient stage, improvement in visual acuity may occur under appropriate general treatment. This may not be due entirely to a decrease in the extent of the cataract, or increase in the transparency of the lens, for once the fibers are degenerated they will never return to normal and operation is the only cure, but the nutrition of the nerve and the seeing coat of the eye may be improved.

Organizations for the blind can aid in preventing cataracts by disseminating information in regard to the hereditary nature of certain cataracts and the possible danger of transmitting the defect; by aiding in safety campaigns in industry and by stressing the danger of playing with pointed instruments and air rifles; and by assisting public health organizations in raising living standards and promoting measures to improve health.

Ophthalmia Neonatorum (Babies' Sore Eyes or Gonorrheal Conjunctivitis).—While all inflammation of the eyes in the newborn is not caused by gonococci, the gonorrheal variety leads to the most serious consequences. Fortunately, the incidence of ophthalmia neonatorum has been greatly reduced, as reported by the National Society for the Prevention of Blindness. Thirty-one years ago 28.2 per cent of the pupils

entering schools for the blind owed their misfortune to babies' sore eyes. Ten years later the percentage had been reduced to 18.4. In the school year 1935-36 it was 9.1 per cent. This is the result of the adoption of laws, in most states, requiring doctors, nurses, or others in attendance to put prophylactic drops in the eyes of babies at birth. The complete eradication of this source of blindness is regarded as scientifically possible. Laws requiring the use of a prophylactic have been enacted in all but three states, although in fifteen states exemptions are allowed. The co-operation of associations for the blind can aid materially in obtaining enforcement of existing legislation requiring the use of an effective prophylactic. Even more important in preventing ophthalmia neonatorum is improvement in the prevention and treatment of gonorrhea and especially treatment of the birth canal before delivery so that gonococci will not enter the conjunctiva.

An agency dealing with the blind often learns of cases of ophthalmia neonatorum which have developed either through failure to use a prophylactic or through infection after birth. Immediate medical and nursing attention are necessary and will prevent blindness in most instances. When agencies hear of such cases they should assume responsibility for providing directly or through other agencies, prompt medical attention and hospitalization if necessary.

Syphilis.—Study of 100,000 case records shows that 5,969 patients (approximately 6 per cent) had eye lesions which may have been of syphilitic etiology. However, according to conservative estimates, syphilis is the cause of at least 15 per cent of all blindness, in several occidental countries. For every case of total blindness traceable to syphilis, there are several times as many cases of serious impairment of vision caused by this disease.

Patients may be divided into two classes: those with acquired syphilis and those with congenital syphilis. In those who have acquired syphilis, ocular signs often appear long

after the initial symptoms of the disease have become manifest. Hard chancre (the primary lesion) of the eyelids is very rare but the mere fact that it occurs teaches us that the disease may be spread through kissing. Many patients, treated for a time and seeing no signs of skin disfigurement or external evidence indicating the need for further care, fail to follow medical advice. The tissues of the eye, like the tissues of the spinal cord and nervous system, are most susceptible to infection and suffer from the accumulation of toxic substances, which may not be easily recognized for from 20 to 30 years after the onset of the infection.

Among the eye involvements which may be caused directly or indirectly by syphilis are interstitial keratitis, iritis, choroiditis, retinitis, optic atrophy, and a number of other serious eye conditions. No part of the eye is exempt.

When the seeing coat of the eyeball (the retina) is affected by syphilis, the blood vessel coat (the choroid) is likewise involved and chorioretinitis follows. In many cases syphilitic retinitis takes on a form which simulates retinitis pigmentosa (a progressive disease of the retina with pigmentation, the cause of which is unknown). We then see areas of pigment scattered over the entire back of the eye. These patients also have night blindness. In these cases salvarsan and mercury may aid, whereas the cases of true retinitis pigmentosa apparently are not benefited by these drugs.

Early recognition and appreciation of the importance of immediate and continued treatment, perhaps extending over several years, will tend to reduce loss of vision as well as the many other physical disasters consequent upon syphilis.

The ravages of congenital syphilis are so serious and can so largely be avoided by known preventive measures that we are challenged to fight for future generations of innocent children. Holloway estimated that 75 per cent of congenitally syphilitic persons sooner or later show distinct ocular evidences of syphilis. The child may be born with normal sight but, with this disease congenitally present, vision may be slightly more impaired each year during childhood and youth. If proper

precautions are not taken, such eye conditions as interstitial keratitis, one of the common causes of blindness, may result. It is, therefore, important that children in whom there is any reason to suspect congenital syphilis should be kept under careful supervision and that every precaution should be taken to control the disease. The congenitally syphilitic child may have certain characteristics which are easily recognized, such as the stature, shape of the head, formation of the teeth, etc., but in many instances no cranial or facial stigma is evident.

Physicians generally agree that properly administered treatment of the expectant mother begun as early as possible, and in any case not later than the fourth month of pregnancy, will almost certainly avert the possibility of syphilis in the child born of a mother in whom the disease is present.

Public education concerning syphilis has revived the interest in legislation requiring premarital medical examinations. By the end of 1937, 23 states had passed some such legislation, although a few limit the provisions to the male applicant for a marriage license. Now that the attention of the public generally is focused on the problems of syphilis, we may hope that control of this disease will eventually eradicate blindness and visual impairment from this cause. Agencies for the blind may serve in this public health movement (1) by co-operating with organizations dealing with the prevention and control of syphilis; and (2) by referring for adequate medical and social treatment individuals or families in whom the disease may be present.

Hereditary Blindness.—Workers with the blind are often called upon for an opinion as to the danger of blindness in the children of blind parents. It is important, therefore, for them to have a correct understanding of such questions and to use their influence in the right direction when the occasion arises. There is much misinformation current regarding the possibility of inherited blindness. But first it would be well to explain what hereditary blindness is.

Truly hereditary blindness is that which is transmitted

through the germ plasm from parent to child. It is an inherent part of the child's make-up, present from the moment of conception, and manifests itself either in blindness from birth or in a weakness or defect which ultimately produces blindness. It is transmissible in the same way that the color of the eyes and the shape of the features are transmissible. Unfortunately, little is known about the rules of transmission. However, it is safe to say that parents who are themselves blind from hereditary causes or who have, in either family, cases of hereditary blindness, should not risk having children.

In the present state of our knowledge concerning the causes of blindness, it is difficult to differentiate hereditary from congenital causes. Statistics (1935-36) from residential and day school classes for the blind in the United States show that 48.6 per cent of the blindness is due to congenital and hereditary causes.

Nettleship traced senile and juvenile cataract through 167 families, three to six generations being affected; and studied 238 cases of hereditary cataract. In one family, 30 members in four generations showed the defect.

Loeb reported a family in which every member for five generations was affected with cataract. He also records cases of six families headed by blind parents in which 17 out of 31 children were blind.

Howe found 8 cases of glaucoma in one family. After several years this number had increased to 14. Forty years ago two young people, congenitally blind, were married. A few years ago their blind progeny numbered 17.

Fortunately, many so-called hereditary eye defects are really congenital or caused by birth injuries; but many thousands of cases are truly hereditary, and organizations for the blind can aid by disseminating information regarding these defects and by co-operating with agencies interested in hereditary and congenital diseases.

Trachoma.—While the United States has for many years refused admission to immigrants showing symptoms of tra-

choma, there are thousands of citizens and Indian wards afflicted with this disease, which often results in loss of sight and in economic failure.

Preventive measures are handicapped by lack of knowledge as to the exact cause of the disease which is now believed to be a virus, but all public health measures directed against overcrowding and those which improve health and living conditions are of value. Institutions for the blind should be careful to exclude applicants who have trachoma until an eye physician says the disease is not transmissible.

Glaucoma.—This disease causes much of the blindness of middle age and later life. Jackson estimates that 12 per cent of all cases of hopeless blindness are caused by glaucoma. There is also the type known as congenital glaucoma, which occurs in infants. This is called "ox-eye" or buphthalmos. It is probably due to poor development or blocking of the outlet channels, and, occasionally, to a prenatal inflammation.

Glaucoma is now being treated as "a sick eye in a sick body," and, while no definite cause has been determined, certain investigators are beginning to believe that general disorders and chronic infections may play an important rôle. Relief from symptoms and arrest of the disease, but not a cure, are all that usually may be expected from treatment. Often blindness and intense continual pain can be avoided.

Agencies for the blind can aid by disseminating information in regard to the great necessity for the continued observation and treatment of patients who have glaucoma, by aiding the promotion of measures to improve the general health, and by urging the periodic examination of the eyes, especially in middle-aged and older persons.

Tuberculosis.—Tuberculosis of the eye causes a large amount of blindness. It may appear in children in the form of disseminated choroiditis, that is, scattered areas of inflammation affecting the blood vessel and seeing coats of the eye. It is estimated that 25 per cent of the diseases affecting the blood

vessel coat of the eyeball, which may result in blindness, are caused by tuberculosis.

Another type of tuberculosis affects the central part of the back of the eye and may destroy central vision. Improving living conditions and diet, and seeing that the patient receives constant supervision and treatment, may effect improvement if the disease is not too far advanced. Certain authorities place great reliance in tuberculin.

Prevention is and should be under the guidance of agencies for the prevention and cure of tuberculosis, and those interested in preventing blindness from this cause can be of greatest service by co-operating with these agencies.

Accidents.—The development of inventions and the resulting hazards of industrial life have brought about a large increase in the blind population. In the United States, approximately 15 per cent of blindness is the result of industrial accidents. It is evident that a still greater number have vision so impaired by injury as to handicap them for life.

In this class of blindness, especially, one finds evidence of the tremendous economic waste resulting from loss of efficiency and the actual financial cost of compensation. To mention an example: over a period of twenty years, under the Workmen's Compensation Act in the state of Pennsylvania, compensation for loss of eyes constituted 28 per cent of the amount awarded for permanent injuries. In other words, of a $56,472,733 total, $15,933,164 was awarded for eye accidents, a greater sum than the combined compensation for loss of legs, arms and feet.

The Pullman Company, one of the largest industrial organizations in the United States, reports the saving from serious injury or destruction of sight of approximately 1,000 men since the adoption of regulations demanding the use of protective goggles. From an economic standpoint, the outlay for goggles has resulted in an estimated profit of 364 per cent. Another company records a decrease in accident cost from $16,500 to $200 a year. Still another reports during a three-

year period a steady reduction in eye injuries from 103 to 4 as a result of the use of protective devices.

Blindness from industrial accidents may be reduced through the co-operation of the employer and the education of the superintendents and workers in means of preventing and caring for accidents.

Legislation, compensation for injuries and other governmental regulations undoubtedly will continue to play a most important part in forcing industry to reduce accidents of all sorts, and this will be advanced by the modern tendency to make industry responsible for loss of life and for permanent injury. The contribution of volunteer safety movements in the industrial field is also well recognized.

Automobile accidents, so frequently accompanied by flying fragments of glass, account for numerous eye injuries. It is gratifying to know that, in 1936, 27 states and the District of Columbia had passed legislation requiring the use of safety glass in motor vehicles, though 7 of them do not require it in all types of motor vehicles.

Fourth of July accidents, in 1937, caused the loss of 16 eyes and injury to 294 eyes, according to the American Medical Association summary, which is admittedly incomplete. Safety education and legislation to eliminate the sale and use of fireworks by individuals are proving effective in reducing this hazard to eyesight, especially when laws are state-wide.

Workers with the blind can aid in preventing blindness from injuries by helping to disseminate information in regard to the frequency and causes of eye injuries, and by co-operating with agencies concerned with their prevention.

The Rôle of Social Work

In some institutions for the blind, every patient, before being accepted, is examined in an eye clinic, and the medical and surgical treatment indicated is carried out. One institution has developed its own eye clinic (Lighthouse Eye Clinic of the New York Association for the Blind). In the last seven

years (November 1, 1930 to October 31, 1937) 6,579 patients have been examined. In this clinic, social service and follow-up work has been stressed, because it has long been apparent that probably the greatest field for preventive ophthalmology is in the eye clinic, and that clinics without proper social service work fail lamentably in preventing blindness.

If proper social service work, including follow-up, is carried out until treatment is completed on all patients with eye diseases which may result in blindness, much blindness can be prevented. In the Lighthouse Eye Clinic, 827 home visits were made between November 1, 1931 and October 31, 1937, and 12,109 follow-up letters were written between November 1, 1930, and October 31, 1937.

Even though all organizations for the blind cannot have their own eye clinics in connection with their social service work, by aiding in the organization of follow-up work for their cases and by stressing follow-up work in other clinics in which they may have influence, they will do splendid work in preventing unnecessary blindness.

The Rôle of Public Health Agencies

There should be the closest co-operation between agencies for the blind and the public health agencies in the prevention of communicable diseases which may lead to blindness. Ophthalmia neonatorum comes under this head, as do measles, trachoma, smallpox, scarlet fever, meningitis, syphilis, and other diseases. Great progress has been made during the past twenty-five years in the prevention of communicable disease, but much still remains to be done.

Because of the almost universal employment of public health nurses throughout the country, time and effort spent in interesting this group in the problems of blindness have increased enormously the possibilities for its prevention. In this connection, it should be pointed out that the public health nurse may be very useful in locating cases of blindness or prospective blindness, particularly in isolated communities.

Should an Agency for the Blind Include Prevention in Its Program?

Any program for the prevention of blindness undertaken by an agency for the blind should be carried out in co-operation with the National Society for the Prevention of Blindness or the state or local agency having a primary responsibility in this field. Some may feel that an agency for the blind is concerned only with actual blindness and should not extend its interest and duties to include preventive work. However, it would seem that the active co-operation of associations for the blind in preventive work is highly desirable, if carried out as a co-operative effort. I fully appreciate that they have their own special work and problems and that most of the active work for the prevention of blindness should be carried on by organizations developed for this purpose. In many cases it is true that preventive work is adequately taken care of by other agencies, and that the agency for the blind should co-operate with them rather than institute activities of its own. In many communities, however, this is not true, and in view of the social and economic importance of preventing blindness, as well as the value of increased human happiness, it is essential that some agency should undertake it.

Conclusions

Much unnecessary blindness may be prevented if organizations for the blind will take active part in the following:

1. Having every client thoroughly examined by an ophthalmologist;
2. Securing surgical or medical treatment for all patients requiring it;
3. Co-operating with existing eye clinics; promoting follow-up work in such clinics; when resources are available, establishing clinics;
4. Co-operating with all interested agencies in obtaining

the passage of laws to improve social conditions and to require the use of certain preventive measures and safety devices;

5. Co-operating with national and local organizations for the prevention of blindness, and with public health and other agencies which deal with certain phases of the problem of prevention of blindness.

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III. THE BLIND PRESCHOOL CHILD

What Shall We Do with Our Blind Babies?

HARRIET E. TOTMAN

PARENTS of blind babies should familiarize themselves with the most up-to-date methods for the care and training of normally sighted children. Government bulletins, published by the Department of Education at Washington, give splendid, simple and detailed information on the subject. Magazines, such as *Parents*, *Child Welfare*, and *Hygiea*, contain helpful concrete advice. Parent-teacher organizations afford much help. In so far as possible, the best that is available for the sighted child should be used in bringing up the blind child. He should be expected to learn to achieve independence in all things that sighted children do, but in many cases it will take infinitely more patience and time to bring this about and at perhaps a slightly older age. By and large, I can think of no activity, not dependent exclusively on vision, that has not been accomplished at the age set for the normal child by some blind child I have known. This brings up to a caution. The parent of the blind child must consider carefully the physical condition of his child and not expect him to succeed in performing intricate co-ordinations of hands, feet, etc., before his muscular development will permit it. Likewise, if the child is retarded mentally, the hand use, especially in fine co-ordination, his speech, and even his walking will often be slower in development.

If your child is blind from infancy, you have from three to four months in which you need not concern yourself with the immediate training of your baby as a blind child. This

period is for the physical development, and your duty is accomplished when you see that he is well fed, kept clean, and has an abundance of sleep—in short is a healthy little animal. This will permit parents to get their mental poise and a wholesome attitude in the matter of the child's condition. It gives an opportunity to lay plans for his training. There are three distinct phases to be considered, the physical, mental, and emotional. In all three, more attention, more effort, and greater care are necessary than in the case of children with normal sight.

Psychologists tell us that the baby is interested in moving objects. He should be kept where he can watch things in motion, as, for instance, the swaying leaves outside the window and people passing. Our blind baby misses all such things of interest. How shall we replace these visual stimuli? We must begin, even in infancy, to use the oral and tactile stimuli, which are of so much importance to the blind youth. Care must be taken to have the environment rich in tones—tinkly bells on his cuddle toys which are also always pleasant to touch, squeak toys, musical blocks, soft music, more occasions to hear mother's voice. Strings of wooden beads on the carriage or crib and other toys should be kept where the baby hands will find them readily and investigate. Fortunately, more and more of our so-called blind babies are not entirely without sight. This means that attention must also be given to stimulating—but not to straining—whatever vision there is. The rattle and other playthings should be colorful. The baby should be placed where he can see the sunlight play on objects, though not shine into his face, and enjoy light and shadow. Precaution should be taken, however, against his developing the habit of holding up his hand before his face to watch the light trickle through. It looks very sweet in a tiny baby, but the grown-up boy who sits absorbed in such pastime gives an appearance of low mentality.

Parents of children with normal sight are not encouraged to urge their babies to walk. Walking is instinctive, they are told, and when the little leg muscles are strong enough,

the baby will walk. With a blind baby, however, the stimuli and incentives to walk are not as great. The blind baby does not see the much-desired plaything just out of his reach, which would tempt him to wriggle and push until he could grasp it. So, both creeping and walking must be encouraged by interesting sounds and voices at a close enough range to attract. For the totally blind baby, fear is a deterrent, especially if he has had a fall. When he shows fear, the parent must lead him by the hand, being very careful to give him a sense of security. He can be encouraged to go from one person to another a short distance away, first with a hand guiding him all the way and gradually alone. There should be laughter and rejoicing when he takes a step alone. The use of a Kiddie-Kar strengthens the legs and tempts the baby to stand. For the beginning walker, a play-pen is also useful. It gives the baby a small space in which he feels secure. He can guide himself around it. The wooden beads or other playthings on the wires, which should always be present on a blind baby's pen, can be rattled, or the bars may be tapped to attract him from one side to the other. When he can walk freely, care should be taken not to confine him to so small an area. He should be stimulated to investigate the rest of his room and home and, later, the yard. Going up and down stairs should be encouraged. I believe real stairs, rather than toy stairways, are better for children to learn on. In fact, in all teaching of blind children the best equipment is that which approximates conditions as they will find them in life. The trips up and down the stairs must be carefully supervised until they can be made independently. You will soon find your blind baby can do this as easily and safely as a sighted child.

In walking, care must be taken that the feet are used correctly. There is a tendency toward toeing out and to flat-footedness in blind children. The feet are pushed out as a guide to feel the way and acquaint the child with obstructions. This should be discouraged and the child taught to walk with feet straight ahead. Much activity is necessary to

avoid flat-footedness. Running and jumping, with special attention to getting up on the toes, do much to correct it. It is hard to get the blind child to jump more than an inch or two at first. In one case an automobile tire was a help. With it placed flat on the ground, the little fellow jumped in and out of it, and, if he lost his balance, it was a comfortable place to sit down. Some children, on the other hand, walk always on tiptoe—a practice not so serious at first in the tiny child, since it does counteract flat-foot, but still something not to be allowed for habitual walking. Freedom of activity in a sufficiently large space with which the blind baby has become familiar so that he is not afraid, will do much to assure normal gait and use of the legs. Running freely and walking rapidly are possible for the blind child in familiar and unrestricted space. It is better, however, to encourage a more deliberate rate of speed for all ordinary locomotion. This is to avoid the necessity of the very ugly mannerism of groping. The use of the hand reaching forward to ward off contacts with objects should not be permitted. If the child walks slowly and gives attention, he will be able to sense near objects. He can also be taught how to orient himself in a somewhat familiar place and often to go about in unfamiliar rooms by touching objects in a natural way with the hand at the side.

Any blind baby, unless he is so low-grade as to be classified as an imbecile, can learn to feed himself. Yet I have known children of seven or eight years who were still being fed, and others who have had no solid food because parents thought blindness precluded this. As soon as the baby shows any interest in holding the spoon, training should be begun. If the interest does not appear, it should be stimulated. The baby's hand may be placed on the spoon as the mother carries it to his mouth. The first efforts should be used with food that the baby especially likes, and every effort should be rewarded by a satisfactory mouthful. It is, in part, for this reason that I advocate the use of the spoon-in-the-fist position as opposed to the spoon against the third finger and

supported by the thumb and forefinger. The latter is insisted on in many nurseries on the ground that the correct holding should be taught from the beginning. It is possible for a child of eighteen months to learn to feed himself, but at that time he can hold much more securely with his fist, the handle of the spoon supported between the thumb and all four fingers. Moreover, the motion is a shoulder movement rather than the finer co-ordination involved in the more adult fashion of grasp. With this firmer hold the spoon may be kept right side up, and thus the carrying of only an empty spoon to the mouth will be avoided. It is a very simple matter, after the child has become accustomed to feeding himself and has developed the finer co-ordination, to transfer to the more socially acceptable position. Recently a child under my care achieved this when I wanted him to change for purposes of demonstration, and was able to eat his entire bowl of oatmeal with equal ease in the new position immediately after being shown it. If a child is older and his muscular development permits it, by all means use the "correct" way at the start. In the early stages you must keep in mind that many trips from bowl to mouth tire tiny folk whose muscles are not yet accustomed to strenuous exercise. It is better to complete the feeding yourself than to overtire him and destroy his eagerness and interest in self-feeding.

If it is at all possible, the child should have a small table and chair, suitable to his size. He should be fed alone, away from the criticism of other members of the family and the distress over the spilled food and untidy appearance that are inevitable in the beginning. Do not forget that the important thing is to develop self-help early, and that eating nicely will come with patient training. The small table is valuable equipment for much of the child's play. Seated at it, in a chair that permits a comfortable and correct placing of the feet on the floor, he can use his play materials without acquiring postural defects.

All children learn through play. The blind child is no exception to this. In fact, it is most important that his waking hours be filled with some sort of occupation. It is not necessary that

he be constantly attended, but he should be supplied with something to busy him. The child does not require expensive and complicated toys. If you can buy him but one thing, I believe this should be a set of blocks. They should not be too small, not less than about two-and-a-half-inch size. These are better for baby hands than the one-inch cubes which require a more difficult grasp of fingers. They are made now with faces differently designed, one side raised letters, another side smooth paint, a third embossed pictures, and one divided diagonally with one side raised, etc. This provides an opportunity for distinguishing different kinds of surfaces and developing recognition by touch. All kinds of larger blocks and many shapes are interesting and useful. You may have a clever woodworker in your family who can make these at home. Do not be concerned if your child spends hours piling these, or other little toys, in pails or boxes, only to dump them out and begin again; or carries them here and there and back. This manipulating is what helps his hands and arms to grow. Piling and constructing in designs will come in time, when he is ready for it. The importance of this handling inclines me to include a box for the blocks as an essential part of a blind child's equipment. In fact, I should say *boxes*, for I have often found children more interested in the box and cover than in the contents. Pasteboard boxes, old coffee cans with smooth, rounded edges, and wooden boxes with hinged covers make delightful and fascinating pastime. Opening, closing, turning upside down, filling and emptying and closing again—each movement makes the little muscles grow stronger and harder.

Drag toys of all kinds are favorites, especially those that rattle or tinkle as they go. When they get caught in some too narrow passageway, do not run to extricate them. Let your child solve the problem himself. If it becomes too difficult a task or arouses anger, suggest a way to release it and help him to do this only if necessary. These smaller drag toys can be followed by wagons, rather small, easily running ones for the tiny tot, although you will be amazed at how large and heavy a wagon a little fellow can pull. These can be used to

ride in, to push oneself about the yard—and splendid exercise it gives for the pushing leg, which should, of course, be alternated. For other outdoor play there should be sand-boxes, a pail, and shovel (old pans and spoons serve just as well).

At about four years of age, or whenever the finer muscular control is achieved, cutting with scissors and wooden-bead stringing may be added. The scissors should have the rounded points of the kindergarten variety. Free-hand cutting of newspaper and wrapping paper in strips or shapes pleasing to the child will improve hand control and prepare for later kindergarten work, as well as fill many hours of play. For stringing beads, the large wooden beads should be used first and the shoestring should have a long tip. One clever mother whose child had difficulty at first used a flexible covered wire instead of the shoe-lace. Later the child used the smaller wooden beads and, to my surprise, even tiny glass ones with her mother's sewing-needle. Hammer, nails, saws—real tools—can be used by the more mature four- or five-year-old. Musical toys, toy instruments, not only interest the child at this age but train the sense of rhythm. The drum and triangle are especially helpful for this. Inexpensive Victrolas with small records of nursery rhymes and games can be played by the child himself. Dolls of all kinds are good at all ages. With clothes that can be removed they furnish a splendid incentive, as well as practice for the child's training in dressing and undressing himself. The normal blind child should be able to do this except for shoelace-tying, by his fifth year.

Ability to play alone and direct one's own play is most desirable. Successful achievement in this makes it more possible for the blind child to derive one of the greatest benefits of play, the companionship of other children. Do everything to make this possible and encourage your blind child to have sighted playmates. The give-and-take of such relationships, the sharing of toys, and the development of ability to get along with others is an important part of your child's personality growth.

Someone should occasionally check to see that the child is

using his playthings. Otherwise he may fall into certain meaningless, repetitive habits known as "blindisms." "What shall I do to break my child of rubbing his eyes?" the distraught mother asks. Of all "blindisms" this is perhaps the most common, most persistent, and hardest to correct. Our first effort should be to prevent the formation of the habit. The use of elbow cuffs with the tiny baby at the first sign of eye-rubbing is permissible if not too long a period is required. One hesitates to tie down little hands or to restrict the activities so essential to all, and especially to blind children. If you are constantly with the child, a gentle removing of the hand, followed by placing some object or plaything in it, helps. Toys requiring the use of both hands often prevent the habit. When the child is old enough to be appealed to, he often responds to the idea that grown-ups do not do this, and, especially as he nears the kindergarten age, that kindergarten children keep their hands away from their faces. Other mannerisms, such as waving the fingers in front of the eyes to let the light trickle through, swaying of the body, meaningless jumping, and twirling of arms should be discouraged. They usually indicate a lack of normal activity and a misdirection of abundant energy. If you furnish more interesting and useful occupations, these will vanish.

Holding the head down might be included as a "blindism." The blind child has no incentive to keep his head up as does the sighted child to look about him. You should therefore teach him to carry his head erect. He can check this position himself by standing up against the wall to see if the back of his head is flat against it. You should further teach him to turn his face toward, and to look up at, people when he is talking with them. Likewise, when he is at play, he should "look" at his play material. In short, in every way he should conform as much as possible to the habits of the sighted. He cannot imitate many of these unless you show him, although you will be surprised to see in how many little ways a blind child will copy actions determined from hearing about them, such as reading a book, that is, holding it and turning the pages

slowly. For some children with a small amount of vision and an eye condition which makes direct light into the eye painful, holding up the head is extremely difficult. In such cases an oculist should be consulted to see if this can be helped by the use of dark glasses. Where there is no relief, the best one can do is to encourage the raising of the head when talking. Care should be taken also to have the child practice the correct head position in a dimly lighted room in order to counteract the stretching of the neck muscles at other times. This inability to face light usually becomes less marked as the child grows older.

In line with your efforts to have your child appear as pleasing as possible is the need to make disfigured eyes as little objectionable as can be done. Such eyes, when permanently and totally blind, should, on your oculist's recommendation, be removed and replaced by artificial eyes. You will be pleasantly surprised by the improved appearance. Where there is sight remaining or hope of restoring vision, unsightly eyes may be shielded by glasses with tinted or frosted lenses. This should be done while the child is still young, not only for aesthetic purposes, but also so that he may early accustom himself to their use.

Although this article is concerned not with medical care but with the training of the blind child, I should like to admonish parents to take such measures as reputable oculists advise for improvement of the child's eye condition at as early an age as possible. Not only are the chances better of the fullest possible development of whatever vision can be restored, but also the child will receive that many more years of use of the eyes at a time when, I believe, he will learn more from using his sight than at any other age.

The preschool years are an important time in the child's mental development. No one would venture to estimate how much the sighted child learns in those years by just using his eyes. For this reason it is very necessary that much special attention be given the blind baby at this time. During the first year, and especially when the baby is first learning to talk, the

names of toys given to him should be spoken as they are put into his hand. As mother dresses him, she should say, "Now the stocking, now the shoe, etc." She should say "foot" as she puts his hand on it, then "toes," etc., each time touching the part of his body named. When he has learned to talk, the never-ending stream of questions should be patiently answered. If he doesn't ask them, he must be told many things. His attention must be called to snow and rain, sand, plants, animals, etc., and he must touch them. If he has initiative, let him investigate things for himself rather than describe them to him. Later when he talks about them, note and call his attention to what he has overlooked. When a bird sings or a dog barks, he should not only be told what the sound is made by, but an effort should be made for him to see the bird or dog first-hand. Models for those animals which cannot be secured or which it is unwise for him to touch can be seen on a visit to the Natural History Museum, if one is available.

As soon as the baby can be interested, he should be read to. The first books should be those which touch the life the child knows. For instance, a country child will like Tippett's *Singing Farmer*, while his *I Live in the City* will be more pleasing to the city child. I mention these also because of their singing quality which always appeals to the little child. There are many delightful modern books that deal with the homely, everyday things of life. Many of these are illustrated, and if your child has some little vision, he should be encouraged to get what he can from pictures. In fact, you should never assume that anything will not be enjoyed by your blind child. The totally blind little tot "plays reading," even to pretending to look close and read. Blind children in our residential schools go to puppet shows and enjoy them immensely. In our day school classes the primary children make their puppets and put on their own show. Attendance at any kind of a performance is much more valuable educationally if, in addition to your own explanations of things that can be appreciated only by sight, an opportunity is made for the child to get actual contact with the actors, or, in the case of the puppet

show, the puppets. You will find people very glad to make these things possible. When your little child hears the fire-engine, do not stop with explaining what it is, but arrange for a visit to the fire-station. I cannot emphasize too strongly the necessity of increasing the experience of these little shut-in folk who must secure their pictures of the world about them through the conscious efforts of those responsible for their training. Furthermore, these experiences should include the greatest amount of first-hand information. The child should be led to make his own critical investigations. A word from you helps him to discover for himself, as, for instance, one of my four-year-olds did, that old apple-tree trunks are rough and the young ones smooth. We teach our children that the sun is yellow, the grass green, and the snow white. What does it mean to him? Does it matter? He asks you "What color is this?" and later on he, too, can talk the language of the seeing.

So he goes on with his tiny hands showing him what life about him is. It is all right to teach him rhymes and counting and the like. A blind child memorizes readily. Don't, I beg of you, show him off for this. Do not let an admiring group marvel at his wonderful mind. Do, though, spend much time planning ways for him to secure as nearly adequate information as he can and fill his time with activity and the happiness that comes from being busy and learning.

It is quite possible to train the small blind baby in your own home. This will mean that an infinite amount of time and of patience must be expended by someone. If you cannot do this yourselves or arrange for someone else to do it for you, if your child has other physical defects or mental incapacity which make it impossible for you to cope with the situation, send him to a nursery for blind babies. The parting may be hard, but, if your love for your child is great enough, you will bravely endure the separation for the sake of the greater success and happiness that will be his in later life.

When your child is five, if he is physically and mentally developed and wisely trained, there is no reason why he should not attend a regular kindergarten. Even in public school sys-

tems maintaining braille classes, a blind child is sent to kindergarten with the normally-sighted children. If, however, your child is immature, or if he has not learned control and ability to play with other children, it will be better to delay his enrolment, while you increase your efforts to achieve better development.

At six years of age, or when the psychologist and kindergarten teacher feel your child is mentally ready for reading, he should go to a special school for the blind. If you are fortunate enough to be able to live in a community which provides day school training for blind children, your child can begin his education at once. Day school classes not only admit, but prefer to accept, children at six years of age. Many residential schools do not enroll children at that age. Some nursery schools for blind babies and some local organizations for the blind provide classes for the years intervening between kindergarten and admission to the state schools for the blind. Advantage should be taken of such opportunity unless some adequate training can be provided in your own community.

You will recall that we were considering three phases of the blind child's training: the physical, the mental, and the emotional. Like the proverbial faith, hope, and charity, the greatest of these is the emotional. You may secure for your child the finest physical growth and control, an excellent adaptation to his blindness; you may achieve an alert mind with a wealth of background obtained through his other senses; but, if he has not attained an emotional adjustment to his handicap, you have failed. To be sure, the success in the physical training makes possible a better mental development, and well-rounded growth in both makes easier, and is essential to, emotional stability. Yet many of the failures in blind adults, well-trained physically and mentally in spite of their handicap, are due to their emotional maladjustment.

It is therefore most essential that much attention be given not only to your own, but also to your child's, attitude toward his handicap. It is inevitable that parents of a blind child should feel intense grief over their child's condition. It is

doubtful if they ever become fully reconciled. To be sure, as the child adapts himself to his condition, this grief is lessened, but, generally speaking, I believe parents feel the handicap more keenly than the child ever does. Moreover, the child may be spared that devastating feeling of inferiority if he is so trained that he develops a sense of satisfactory achievement before he reaches the age at which he becomes conscious that blindness may be regarded as an affliction. This means that parents must control their grief, not pity their child nor allow him to pity himself.

This does not necessitate an avoidance of speaking of your child's condition. In a letter to the mother of a blind child, a worker writes: "The child should know his limitation, but not be constantly reminded of it." It is not necessary to keep the word "blind" out of your vocabulary; you and your friends may mention your child's handicap, but do it unemotionally. Distinguish between pity and sympathy. When the task is hard, such as tying a bow on that shoelace in the dark, a sympathetic, "Yes, son, I know it is hard, but it will come in time," is all right. "Poor child, it's too bad," and condoning the cruel remarks that sighted children often make, such as calling your child "Blind" or "Pop-eye" or "Squint," do not help him, but do create self-pity. So make light of such episodes, assure him that the children do not mean it, that such teasing will be discontinued if he does not pay attention to it. If you treat his blindness in a matter-of-fact way, and if you train him so that, as a playmate, his ability to join in is more apparent than his eye condition, many such scenes will be avoided. This can be brought about if, in the preschool years, parents spare the child tearful regrets and bend their efforts toward developing opportunities for him to feel a sense of usefulness in the family circle. Even as a tiny child he begins to help mother by putting his toys away. To be sure, there must be a place for them easily accessible to him. Later he helps put the silver on the table, or he may wipe it, and then comes the proud day when he can handle more fragile dishes and pour milk for his own cereal. He may also carry his plate

or bowl of food if the distance is short and the way clear. Care should be taken in these early tasks that dishes are not too full and that accidents do not occur. If one does befall him, there must be no scolding, no distress over the broken dishes and spilled food, but encouragement for a greater care and firmer hand next time. Little services rendered to other members of the family make your blind child the proud doer of deeds rather than the spoiled receiver of attentions from everyone else.

One of the biggest pitfalls of the parents of a blind child is the danger of indulgence. Parents, in their desire to offset or make up for the misfortune of the child's handicap, permit him all sorts of extra pleasures and favors, and excuse him from duties lest they be distasteful. In this they err on two scores—one that it is poor training and in the long run an injustice, not a kindness, to the child; the other, that in differentiating in behavior toward the handicapped child, they accentuate his unlikeness to his brothers and sisters. The ill-trained blind child becomes the ill-natured blind adult, and nothing is more pathetic or unfortunate than those blind adults who are so disagreeable that no one is willing to give them companionship. Happy is the blind child whose parents keep a firm hand and a careful check on their sympathies so that he grows up mannerly and considerate of others and is permitted to know the joy of sharing pleasure and possessions and doing favors for his friends. The development of such satisfactions crowds out any tendencies to morbid attitudes toward his blindness. His delight in doing things prevents the growth of that unwholesome feeling that the world owes him something.

Thus the opportunity lies in your hands, in the preschool years, to build for your child, in spite of his blindness, a well-rounded personality. The training of his body and mind means many hours of your attention and an insistence on his self-help. The development of his emotional stability means the control of your grief and sympathy. In so far as you achieve this, you assure for him a useful and happy life.

Reading List

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IV. EDUCATION OF THE YOUNG BLIND

The Education of Blind Children of School Age

EDWARD ELLIS ALLEN, D.Sc.

IN THE decade following the World War, so long as labor was in demand, society, measuring the effectiveness of our schools for the blind by the industrial absorption of their trainees, then at its peak, pronounced it good. This education and training had long been good: no country had done better. But society might have been incomparably more justified in its complacency had it been less reluctant to give employment to those whose education it had so generously supported. Indeed, preparation of the blind for reasonable work-a-day diffusion in the world, the American ideal, has grown to be unbelievably more difficult, even under normal conditions, than their school education ever was. In fact, the experienced among us have long understood that the only satisfactory solution of the problem of blindness lies in its *prevention.* We no longer accept a given proportion of evil as a constant which is inevitable and needful in this world in order to subserve the good and—otherworldliness. In this twentieth century preventive medicine is putting a stop to more and more of the evils flesh is said to be heir to. That former chief cause of infantile blindness, babies' sore eyes, is yielding beautifully to routine compulsory prophylaxis. Congenital syphilis is now being attacked in the expectant mother showing a positive Wassermann; next each other obvious cause will be, until central or obscure brain troubles and accidents are the only causes left. Public school sight saving classes, which are multiplying all over the land, are nobly meriting their name. So childhood blindness, whose incidence no longer increases with

the population, is destined to decrease rapidly, from now on. What an arraignment of civilization it is that probably 72 per cent of our blind population need not have gone blind! Although our education of the blind child of school age has just celebrated the completion of its first century, it will scarcely survive to celebrate another. Most blindness being a condition incident to adulthood and advanced age, such future education of the blind as there is will doubtless be a part of the coming general adult education.

But the indicated dwindling in the number of blind children through prevention and conservation is to be accompanied by another change, the lessening of the number and proportion among them of the high and average I.Q.'s. A close student of present conditions writes me:—"The unpromising are certainly in the majority in every school for the blind." Existing schools must recognize this prospective fact and safeguard the interests of both the promising and the unpromising pupils by schooling them separately and differently. The latter are not educable: they are only trainable. It is wastefulness and folly to run them together longer in institutions. Parents of dull children will do well to realize that these are not happy when kept in contact with the bright. It is high time that we should specialize on strength and not on weakness. Our feebler children should be taught with every tenderness and care, preferably in a country location, contentedly happy doing agricultural and domestic things. What I shall further say concerns the stronger pupils, the educationally competent.

Some wise schoolman has said:—"The younger the child the less his power of resistance; and lack of care may give an unhappy twist to budding minds which may be irremediable." Here is an argument for the preschool training of any child and particularly for one shut in by blindness. It is gratifying to know that such training has already been begun. Surely the movement for it will spread and the sooner the better, provided it is well and wisely done. We are convinced that it can best be carried on under visiting counselors in the child's own home or wherever feasible and possible, in the local nursery

school or health clinic. Leaflets on advice to parents of blind children have long been available. These particularly urge active play with children who see. Since the blind baby's home environment will itself be improved by the influence of such training and direction, he will begin school a very different pupil from most of the beginners in the past. Who knows but he will be able to enter, keep up, and advance along with children of his own physiological age?

Touching kindergartens the following, printed in 1884, is to the point: "It is one of the most notable of recent discoveries in education that the system of *pre-primary education*, devised by Froebel, has a peculiar advantage for the blind. Nearly all the gifts and occupations can be made a basis of both manual and mental training for them, with at least if not indeed better results than with normal children." Certainly I would place a blind child of five or six years in a public or private kindergarten, if I could. This is no experiment; it has been done, and with surprising benefit also, to the seeing tots. Yes, and I could cite instances where wisely guided blind pupils got all their schooling among the seeing, and never regretted it.

Usually, however, the question arises: Shall I send my blind child off to a residential school or shall I let him go daily to the special center, the so called "braille class," if there is one in his home community? The answer depends somewhat on conditions; for there are valid arguments for each kind of school. (You will find them condensed on pp. 343-4 of Best's *Blindness and the Blind*, published by Macmillan.) My own field has been the residential school; and laboring, as I have, in every way to eliminate from it the purely institutional, I know this can be done. Teachers of the blind should closely study the principles governing the residential school as well as the public school classes, for each kind can learn from the other. Indeed I believe both may gain much through co-operation. In my own home town, where there was no such day class, we did just that: whenever one or more of my pupils was unquestionably prepared to hold his own in the local pub-

lic high school, we sent him there as a regular pupil, and of course saw to it that he continued to earn his welcome. In every single instance the change benefited him. It served as a bridge from the residential school over into life outside; for it led him to measure himself early with those not handicapped with whom he would later compete in the world. Strong students, though blind, should be welcome anywhere. The city high schools of Hartford open their doors to such individuals. Baltimore's have long been thus hospitable, as have been and are those of other cities which have a residential school. The school for the blind at Overbrook, West Philadelphia, through service-minded, volunteer readers aplenty, carries on the most remarkable machinery that I know of for giving to all its selected, advanced pupils, public high school and to some even college and vocational teaching experience. The privilege desired is zealously sought and the privilege sought being optional with the city educational systems accounts for the continued hospitality. There are no braille classes in New England, nor indeed, in most sections of the country. But some 19 cities have them, the local law admitting the blind of school age. So there it is not hospitality or selection which governs. Doubtless some public schools welcome these special pupils; doubtless not a few, particularly those already overcrowded, would prefer their absence.

I have visited these braille centers in the public schools of Greater New York, Chicago, and Cleveland. The principal of one such school admitted to me that when his teacher of the "blind class" kept her pupils intellectually abreast of the seeing of his corresponding grades, that was all he asked or expected of her; for the school day was not long enough to do more. Now just that is by no means enough. Because lack of eyesight favors deepness and consequent narrowness, the elementary education of blind children calls for an all-round development at school, an aiming at the education of the whole individual. In Cleveland I found that the knowing special supervisor had lengthened his school day by an hour and had added a Saturday morning session, by which means he had

given his seriously handicapped pupils the equivalent of a seven day week of schooling instead of the usual five and, besides enriching his curriculum with manual training and music—studies almost essential in our educational field—had fitted up two small, hired houses into which he moved successive groups of the neediest and narrowest children in order that they might live awhile under proper conditions and acquire handiness and other balance through doing those things which their parents failed to teach them at home. All this was splendid. Being blind himself, he knew well that blind children learn best through manifold guided activities, and that in order that they may imitate qualities and characteristics which are most worth while, they must come in contact with those selected teachers and house mothers who feel it a privilege as well as a duty to mingle with them as far as possible in sympathetic and social equality. Detroit, the New York Lighthouse, Brooklyn, Jewish and other Guilds in several cities somewhat similarly supplement the services of the public school centers.

Now, under-privileged children particularly need to build their characters on habits of efficiency and success; and at the beginning of school life this desideratum is best attainable wherever most ways occur of being successful in the things which children value. So I should prefer to send any blind child for whom I felt responsible to a residential school, being careful to select one having inspirational leadership with shepherding, and a really good and compelling community spirit. There he would grow in body and soul, working and playing in the atmosphere of equality with others like himself, which to my mind is the right dynamic beginning. Blindness being the rule there, it does not preclude or deny participation in any extra-curricular activities; for example, the blind boy or girl would not be left out of the field sports in which childhood and youth delight. Controlled athletics at school is a mighty means of socialized education,—but for the blind children's getting and keeping physically fit, it is far

more: since for them it is singularly true that "Hopefulness is a state of mind dependent on physical vitality."

Two of the greatest leaders the blind ever had, Dr. Howe and Sir Francis Campbell, realized that the early vitalization of their charges through wake-up morning baths, brisk walks, games, and physical exercises of many sorts, chiefly outdoors, underlies all intellectual attainment and life success; and they made such training the corner-stone of their work. Then too, a team of seeing boys will gain proper respect for blind jumpers, shot putters, sprinters, and even wrestlers through matching themselves with them. Visitors to one of our present-day residential schools are commonly surprised that life there can be so full, varied, and even colorful. I recall two instances when for weeks together the public schools of my town were closed owing to smallpox and infantile paralysis scares. My residential people, keeping within bounds, simply closed the gates against the public and not only continued classes but turned the whole great place over to our accentuated community work and play, which became in its multifariousness so interesting and absorbing that the time of quarantine passed away quickly enough. Besides, it yielded valuable experience in intensive, socialized education. The closer contact between teacher and taught brought about improved mutual sympathy and understanding.

But, but;—this very possibility of continuously motivated entertainment within a cloistered, self-serving, self-sufficient community has its weak if not its bad side. Because it does not furnish the pupils with enough brushes with reality; because in their daily life they discover little if any relation between comfort and enjoyment on the one hand and personal effort and sacrifice on the other; because, therefore, it fits but poorly for quick diffusion in the world outside which, according to a blind placement agent, is in no way fitted for blindness, I would limit my youth's sojourn at boarding school. The prepared, strong and still tutorially guided blind pupil of the residential will gain from a change to a public school. Just when, at what age of advancement, this experience can become

most rewarding to blind boys and girls will vary with the individual—possibly at the end of the broad and rich elementary course; better maybe, with the pupil of ambition and parts, after finishing junior high school. But by no means should every youth, blind or seeing, undertake higher education. *If I could plan and carry out my preference now,* I should conduct no senior high school department but should send every proper pupil of that advancement out daily for such opportunities or, if conditions favored, bring about such individual's attendance at the high school of his own town. Several totally blind pupils of mine, who subsequently excelled at Radcliffe, Boston University, Wellesley, and Bowdoin, were prepared for college at their home high school or at some equivalent academy. Since, according to John Dewey, education is life, it ought not to be confined to cloistered living, however joyful, eye-opening, cultivating, and inspiring such environment may be. In any case the pupil who is blind needs, for his own future contentment of mind, to acquire early the habit of concentrating upon making the most of himself, alike culturally and vocationally; and this means nothing less than becoming socially acceptable and industrially wanted.

You know, of course, that, according to the mandate of the White House Conference on Child Health and Protection, we are called upon to educate every handicapped child to the limit of his capacity. We must never allow ourselves to assume the blind child to be merely a seeing child in the dark. If he has enjoyed enough years of eyesight before losing it, he may escape over-introspection and remain normally minded; if he has not seen long or not at all, his blindness inevitably modifies his inlook as well as his outlook. His shut-in-ness from light and color and his more or less constant and necessary dependence upon others for many of the common things and pleasures of life and movement, color his psychology. In other words, there *is* a psychology of the blind. We should not teach blind pupils either individually or in classes as though they saw things as we do; for most of them see them differently. Those

who have never seen anything at all can neither visualize nor completely imagine objects beyond the grasp of their hands. Others of our pupils, again, see things partially or imperfectly; and still others, wrongly. The teacher with such a mixture of psychologies before her has a difficult and responsible task. She should know and recognize each of these pupil conditions and personalities apart and try to guide her teaching accordingly. Well do her classes need to be small, preferably not exceeding ten. Unless pressed by demands from above she will always proceed slowly and carefully, realizing that her charges lack the correcting sense of sight upon which most of us have depended to clarify what was not made clear in the classroom. Her instruction will necessarily be largely objective—at first much more through the hand than through the ear. She will conduct frequent excursions for nature study and for other contacts in the open. She will encourage doing and making and all the project work there is time for. The sand box and clay modeling can be of untold service as substitutes for drawing. Plasticene lends itself to map work; and the more of this the child can do for himself, although under help and guidance, the clearer will be his understanding of geography, a rather difficult study for him. Every map which the elementary teacher constructs *for* the pupil chiefly satisfies *her*.

Because of all this, progressive education ideas, limited to what is common sense, of course, apply particularly well to blind pupils who have to grope for much of their factual knowledge. They are bound to miss a great deal. No one had happened to tell Helen Keller that the ocean is salty, and wasn't she a surprised girl when she first went sea-bathing! "Who put salt in the water?" she demanded. Imperative, indeed, is it "to make use of concrete experiences as a basis for teaching ideas, concepts, relations, etc., and for giving the meaning of language symbols." To subject our circumscribed pupils to standardized verbal instruction is absurd, especially in the early stages. Even reading and writing should wait upon their more fundamental needs, such as hand and special sense training. Embossed books become invaluable in good time. Although

sight saving classes make use of common print adapted to their degree of vision, their children are led to spend more time in other ways of learning,—and there are plenty of such ways—because with people in their situation the habit of dependence upon reading, as also upon the movies, should be discouraged. Do you know that in sight saving classes the proportion of grade repeaters is small? Are you aware that in London all the myopic pupils are forbidden by the County Council oculists to read at all from books at school? In this and in most respects they work and progress without close reference to what other children are doing; and yet their teachers assure me that these pupils, studying mostly objectively as they do, acquire an excellent educational training. They listen to a great deal of choice reading, which somewhat forms their taste for literature and for stories that are worth while. The Talking Book records should find a place there.

Yes, teaching severely handicapped children is a science as well as an art. We often fail to recognize this sufficiently. The most progressive nations of Europe make no such mistake. They never admit that any successful teacher of the seeing can immediately succeed in teaching the non-seeing. Especially in the Teutonic countries is school teaching regarded as a profession and life career. The matter is governmentally controlled—a would-be-teacher of blind children must add to his general normal training at least one full year of special apprentice observing and instructing in residence on a scholarship stipend but without other pay. The final examination of two such teachers happened while I was visiting the Imperial Institution for the Blind in Vienna. When the test was over and settled, I asked the director why there had been so much fuss about it. "We must be extremely careful," said he, "not to suffer the appointment of any one who has not proved his fitness for the position; because, once he has been definitely installed in it, we cannot get rid of him. His official appointment means retention until the retirement age is reached. After that we cannot keep him if we would. He has become a government pensioner for life."

Some of us have been laboring here to bring our special teaching up to professional recognition. Summer courses in our subject for teachers in service have been enthusiastically given at the Illinois and the Michigan institutions, at a few normal colleges, also particularly at Peabody College for Teachers, Nashville; and regular courses by the Graduate Schools of Education of Harvard, Columbia, and the University of California; then our American Association of Instructors of the Blind has appointed a committee on teacher training; but it has all been, in general, up-hill work. Even after a whole century, most of our schools for the blind remain content to pick good, resourceful teacher material and to let it train on the job. This hit-or-miss way may bring fine teaching, but to do so usually consumes a full academic year and, what with our frequent changes in teachers, falls heavily on our helpless pupils. By contrast, our sight saving instruction, while the most forward of its kind in the world, is certainly not more special than our blind instruction, yet it is gradually requiring of its selected teachers special summer school training, and not only that; its small classes, together with its close attention to all sorts of helpful details, make it so evidently superior to those of the common standardized classrooms that this specialty is definitely modifying and improving these classrooms by its mere presence in the schoolhouses with them, and by its scientific adjustment of means to ends.

May I add and emphasize here the need for giving all severely handicapped promising pupils continued vocational guidance leading to an education superior in every possible way to what the average among the more privileged get. To win industrial placement the under-privileged need to excel at something practical, a practical education being certainly the capital of the blind. It is largely for this reason that we insist on extending manual training to mastering one or two handicrafts.

It would help and encourage if some industrial occupation were their monopoly, as massage has been to their fellow blind of Japan. Fortunately Congress has passed a law which opens

post-offices and other federal buildings to stand-keeping by competent blind people. This will incite our schools to train for the many new opportunities it will open up. The training which aims to increase selling capacity must educate for personal acceptability as an essential to business success. It should also implant a reasonable feeling of responsibility towards the customer. "Honesty is the best policy" is more than a means to an end. Honesty is good business ethics.

When we realize that it is not his inability to see that troubles our blind brother or sister so much as it is the consequence of this inability, one of the most discouraging being the incredulity of the employing public, then we have begun to understand, in a way, his situation in a world made by the seeing and for the seeing. Now after school days our people find themselves out of their element, like fish out of water. Employment of some kind is our people's fundamental need, even if this is only social companionship. They should particularly cultivate in childhood and youth habits and powers of self-entertainment. The radio, a blessing to the old, may be stultifying to the young, encouraging them in what they are too prone to do, sit about when they should be exercising in the open air; and entertaining them with over-much puerile nonsense when they should be learning self-entertainment and to be good conversationalists and good mixers. Even finger reading and piano playing may pall. Therefore, teach blind children of school age to play well all sorts of social games, like cards, checkers and chess, and to take part in tournaments. Some champion chess players are blind. I knew a youth who profitably filled up his days while traveling alone across the continent in playing solitaire. Everybody should encourage our people to have hobbies, such as Esperanto. The Esperanto-loving blind make much of this through international correspondence; they even meet in international conferences. A modern language offers a field for interesting study; a certain pupil of mine in England would sooner go without his breakfast than without his daily half-hour of the world's news in

French by wireless from Paris. It fortifies him for the day's work. Like the morning sun, it illumines it.

In conclusion, let me say that a rounded education, including pleasing mixing qualities or socialization, though difficult, is quite possible to blind students. By comparison mere instruction in the usual school subjects is easy to the understanding teacher. She will relieve her class as little as reasonable from doing the things they can do themselves. She will rather suggest and guide. Though she will motivate in each pupil self-instruction, she will never excuse him from tasks because he dislikes them, but lead him to face difficulties and overcome them. No, he, more than his fellow who sees, needs to be master of the 3 r's—needs to read easily, write his braille correctly, and reckon understandingly. A poor speller is nowhere accepted as educated; a blind person not knowing his multiplication tables thoroughly carries an added handicap. He should be made to realize whilst at school that his major one alone is quite handicap enough. If he is wise he will train his memory and strengthen his will power through concentration of efforts—shirking nothing. Our habit of doing things in the easiest way fortifies little if at all—much less well, anyway, than working them in our heads. To illustrate: it is fun to teach blind pupils Latin translation because for them to depend on a many volumed dictionary in braille means more trouble than to ferret out the meanings of new words from context and then to remember them. So, too, it is fun for them to be taught mathematics step by step comprehendingly; for then they will like it and come to do those simple problems mentally which we who see commonly solve by means of pencil or chalk. If our blind pupils are brought up to lean on such crutches their hands and heads will not be free and able to serve as they can and should and must. Thus it is that blindness often strengthens qualities which in most others remain undeveloped and weak. Indeed, without some superiorities our woefully handicapped brother will fall by the wayside in this world of competition; hence the rule: capitalize their advantageous capacities.

Do you realize that there are few callings in which some blind individual has not made his mark? Music is one of these. While our people are not more musical than others, greater numbers of them push it, some as performers, more as teachers, most for self-entertainment. It would be cruel to deprive any one of them of the chance to learn to discriminate good music from poor. It will rather be a kindness to prescribe music study from this standpoint for the delight it will bring them; enabling them as it will to dial their radios for what is genuine, artistic and chaste and so to illumine their darkness with the light of the intellectual and cultural life. I stress this music culture, declaring as I do that it should come to all children of school age and so become a part of them for the rest of their lives.

In general, never assume that the blind child need become a liability either to himself or to the community, but always that he is a potential asset, and educate him accordingly.

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Educational Placement of Visually Handicapped Children

Olive S. Peck

Persons unfamiliar with schools and classes for the blind are often surprised to find many pupils with some degree of sight enrolled. The uninitiated observer is apt to think of blindness only in terms of total blindness, not realizing that there are widely varying degrees of blindness, such as (1) total blindness; (2) ability to see gross objects only; (3) scarring in the periphery, rendering the pupil blind from a safety standpoint but able to read type; (4) impairment of the macula, causing the pupil to be educationally blind while having good sight for safe locomotion.

For many years pupils who had sight but could not see well enough to get along in the ordinary school were placed in schools for the blind. There these children constituted a real problem, since they saw too little to read ordinary-sized type used in text books and too much to rely upon their fingers for reading which is the chief means of instruction in braille classes.

These pupils were sometimes found to be reading the dots with their eyes instead of with their fingers. It was apparent that reading white dots on white paper was even more of an eyestrain than reading small type. It seems psychologically difficult to read with one's fingers while any possibility of reading with the eyes remains.

In 1913 this led to the formation of a different type of special classes in Boston and in Cleveland where partially seeing pupils were given a different type of training from blind pupils. The emphasis in training was placed upon the

use of their residual sight, and later this type of class was called a sight saving class.*

These classes proved a means of providing education not only for a group of children who because of uncorrectable low vision could not use regular school texts and equipment, but also those who because of progressive eye difficulties might become worse under ordinary school conditions and needed careful treatment from the standpoint of eye use.

In general, children with vision less than 20/200 are placed in braille classes. However, many of these cases should be placed tentatively and observed in the school situation in order to determine whether the pupil is to be a finger reader or a print reader. The oculist, parent, and teacher must often pool their recommendations before a course can be determined upon. If the difficulty is one where operative procedure will improve the vision then this eventuality should be borne in mind in planning the educational course. Teaching braille to a child with a cataract which is operable is an unfortunate waste of time and energy to both the school system and the child. Every effort should be made to have the vision corrected by operation or refraction as soon as possible. Bifocals where indicated should be given to the child operated for cataracts before he is introduced to a reading situation; otherwise many avoidable difficulties in reading will develop.

The National Society for the Prevention of Blindness considers the following groups of children eligible for sight saving classes.

"Children may be considered eligible for sight saving classes if they are in any of the following groups:

1. Children having a visual acuity between 20/70 and 20/200 in the better eye, after refraction.
2. Children with progressive eye difficulties.
3. Children suffering from non-communicable diseases of the eye or diseases of the body that seriously affect vision.

During the past decade much attention has been given to the effect of eye difficulties on educational processes and to

* For further information on sight saving classes, apply to the National Society for the Prevention of Blindness, 50 West 50th Street, New York, N. Y.

the psychological reactions of physical disabilities. As a result, it is well to consider the placement in a sight saving class of the following three other groups of children as a temporary measure:

1. Children who have had eye operations (particularly enucleation) as a result of which re-adaptation in eye use, or psychological readjustment, is necessary.

2. Children who are suffering from muscle anomalies requiring re-education of the deviating eye in cases in which an untoward psychological reaction is manifested.

3. Children recovering from diseases such as measles, who need special eye care, until they are able to assume the full responsibility of regular grade work.

It is evident that many factors must be taken into account in deciding the placement of partially seeing children. Hence, each case must be considered individually."

Pupils should be placed in sight saving classes only after an eye examination by an eye physician. Information as to the eye condition and recommendations of the eye physician should be made available to the teacher in order that she may adapt the educational work in terms of the child's eye condition.

All children who enter sight saving classes should first have an examination by an eye physician and recommendations for placement should be made by him. The incidence of sight saving pupils in school population in cities having adequate medical inspection, and where oculists and educators have a thorough understanding of the problem, is about 1 in 500 school population.

Children assigned to sight saving classes should have an intelligence quotient of 70, or above. If the I.Q. is below 70, the child has a double handicap and should be placed upon the basis of the greater handicap, which is the lack of mentality. Therefore, such a child should be placed in a special class for mentally retarded children. In many large cities maintaining both types of classes, materials, books, chalk, etc. are loaned by the sight saving classes to pupils with eye defects in special

classes. This same plan is followed in case a child with a visual handicap is crippled or deaf.

When the child is placed in a sight saving class, the problem is to educate him with the least possible eye and nerve strain; to teach him enough eye hygiene to enable the child to care for his eyes properly and to provide such vocational guidance as will be of assistance in choosing occupations which will not be injurious to his eyes.

There are, in general, two types of sight saving classes in this country:

1. The segregated type. This grouping places partially seeing pupils in special rooms where they carry on their activities.

2. The co-operative type. This plan places the partially seeing pupils in the special room for work requiring the use of the eyes. For all other work they join the pupils of their regular grades.

Over 90 per cent of the classes in the United States are of the co-operative type. While being more difficult to administer, this type finds favor with parents, doctors and pupils. The child recites with pupils of his own grade, after preparing his work in the special room under conditions favorable to eye use. He competes educationally and socially with other children in his community and learns to measure his own achievements in relation to those of others of his group. This helps to prepare him for his later vocational life when he must have his work judged on the same basis as his fellow worker. It is also of distinct advantage to have covered the same day-to-day assignments as the regular grades in case the pupil's vision improves enough to return him to the regular grade. The transfer may be easily made with a minimum of adjustment on the part of the pupil.

The sight saving classroom should be the size of a standard classroom with adequate, properly diffused lighting, both natural and artificial. The walls are usually painted a light tan, with ceilings of very light cream having a reflection value of 80 per cent. The cooler colors are preferred for walls in sub-

tropical regions. All walls, ceilings and wood surface should have a matte finish to prevent reflected glare.

Adequate blackboard space should be provided since pupils do much of their written work at the blackboard. Large, soft chalk, which makes a wide, very white line, is best seen by pupils with very low vision. Blackboards must be kept in good condition to secure maximum contrast.

Books in 24 point type printed on cream colored paper are provided.

Movable desks with adjustable tops are used. Desks having tops adjustable for both angle and distance are aids in maintaining good posture. Cream colored paper and large drawing pencils with soft lead are used. The writing is large, well-spaced, and black.

Besides the work done in the regular classes, most sight saving pupils are taught the touch system of typing as a sight saving tool. This has proved very helpful to students in senior high school and college.

In some cities additional training in handwork and music are given. Eurythmics makes a valuable contribution to training of the child with defective sight who is shy, diffident, awkward and with poor motor control.

When pupils with eye defects reach high school, they are usually either placed in special sight saving classes in high school, or they may go to the high school of their choice with someone to read their lessons for them under the general supervision of a sight saving teacher or a visiting teacher from the Sight Saving Department.

Ocular supervision is very important. Frequent examinations, re-refractions, where indicated, should be part of the program.

The sight saving teachers in general have had special training in the field of sight saving and know sufficient eye hygiene to interpret the recommendations of the eye physicians. They can be a real help in interpreting the eye health program to the parents, school, and community.

The school achievements of sight saving pupils show that

they are able to succeed in terms of their mental ability when the work is put in a form which they can see. Socially and intellectually they represent a cross-section of the school system in which they are located. The majority adjust themselves well to the group of pupils of their own ages.

In maintaining eye health some learning on the part of the child must take place in addition to the skill of the oculist and the knowledge of the teacher. Through a course in eye hygiene the pupils may learn to share in the experience of conserving sight. This course should give only the simplest facts but should aim, through a knowledge of these facts, to build attitudes and appreciation for continued care of the eyes. By making it a school enterprise, sight saving pupils may learn that they are not the only ones who could have information about the eyes and learn ways of conserving sight, but that it should be a school and community effort in which all good citizens co-operate. In a large city where this project has been carried on for some time, carefully and sensibly, it has not tended to make the pupils nervous or neurotic about their own eye conditions; rather the reverse. When the personal approach is avoided in discussing eye conditions, the pupils realize that it is a problem for all the school population and they join in trying to interest their fellow students in the program of conservation of vision. In general science courses some very good units on eyes and seeing are included. Sight saving pupils usually excel in the class when this unit is under discussion, and their scope of knowledge helps to break down any inferior feeling they may have.

It is frequently the task of the social worker to interpret to the doctor and the parents the educational adjustment of the child in respect to his vision. Perhaps the following cases will explain in a more definite way some of the difficulties which present themselves in the school placement of children with defective sight. It is necessary to observe the child at work and it requires the combined judgment of the oculist, the teacher, and the social worker to weigh all phases of the child's possibilities. Sometimes an operation which it has been believed

would not be successful is attempted with good results. This changes the educational picture. We should be willing to make whatever adjustment is possible for the child's educational and personal developments. Our attitudes should be dynamic so that we do not become hidebound through too definite demarkation between types of classes.

A city having braille and sight saving classes near enough together to maintain a strategic position with regard to placing pupils, borderline in respect to vision, is indeed fortunate. Not in all situations is this adjustment possible, but the following cases may present the problem. Cases I and II are low-vision cases placed in sight saving classes and later transferred to braille classes. Cases III and IV are low-vision cases transferred from braille to sight saving classes. Case V, very low-vision, but remaining in sight saving. Cases VI and VII are myopes, the type of cases found in the group of sight saving pupils who have good vision but need care in eye use. They are rarely found in an institution for the blind and while they do not constitute a question as to placement, they may be interesting for purposes of contrast and typify the eye conditions found in the enrolment of sight saving classes in varying degrees. In some large cities having thorough eye inspection, these constitute some 50 per cent of the enrolment in sight saving classes.

Case I.—G. W., a dull child, was referred to the Sight Saving Department at the age of 7½. His eye condition was due to optic atrophy and his vision as given by his oculist was 6/30 and fingers at 4 inches. Although he did not seem to have this vision he was given a trial in a sight saving class. In reading he was able to make out some words, which he did very slowly and with so much effort that he constantly made excuses to get out of reading. The sight saving teacher felt it was impossible for him to learn to read, although he was anxious to learn. What progress he did make she felt was due to his excellent memory. Near the end of the semester the braille class visiting teacher observed him at work in the sight saving class. It was

difficult to determine whether the cause of his slow progress in reading was the result of his low mentality or insufficient vision. It was obvious, however, that he read very slowly and painfully, and that he was physically exhausted after the effort. G. was accordingly transferred to the braille class. Here his progress in reading was still very slow but the headaches and dizziness of which he had originally complained while in the sight saving class disappeared. He has also become much less restless.

Case II.—A. C. was referred to the Sight Saving Class Department by his doctor when he suffered severe loss of vision following a mastoidectomy which had occurred during his second year in school. A. had 4/60 and 6/60 vision and was accordingly given a trial in the sight saving class. He was reported as unadjusted to his loss of vision and very nervous from his numerous contacts with doctors. He was frightened when he had to go to new places but became less nervous after his placement in the sight saving class. He was reported by the teacher as making great effort to learn to read. However, he made very little progress with his reading. The school oculist felt, however, that with 6/60 vision he should be able to read and asked that the trial be extended. At the beginning of the next semester this trial was continued but in a sight saving class in the same building in which the braille class was located. This class was equally accessible and it was felt that the transfer to a braille class, which seemed imminent, could be made with less emotional strain under these circumstances. The difficulty in eye reading continued and the boy's application was not as good as formerly. Toward the close of the semester, A. still did not know the words in the second reader. He held the book very close and seemed to tire quickly. He enjoyed reading, would take a book for himself, but soon became fatigued, rubbed his eyes and never finished his story. The teacher advised his transfer to the braille class. His own doctor's consent to this was secured under condition that he be allowed to do some work with his eyes. The teacher took the

matter up with the parents, who, eager for the boy's advancement, were quite willing to have the change made. The last week of the semester A. was taken to visit the braille class teacher where he understood he was to go the following term. He was pleased to find some boys with whom he had already associated on the playground. A. entered the braille class and made good progress. When his first sight saving class teacher saw him about a half year after his enrolment in the braille class, she noted a remarkable change in his manner in that he was now happy and did not seem worried as he had seemed to be in the sight saving class. His progress has been normal in the braille work and he is no longer considered slow and retarded.

Case III.—A. L. was referred to the Braille Class Department during her sixth year by a hospital dispensary. She was completely blind in one eye and could see only objects with the other. An optical iridectomy had been done on the good eye and further operations were being considered. The school oculist recommended placement in a braille class although there was no question but that the child saw large objects easily and used her sight. The mother was anxious to cooperate in saving what vision the girl had, but due to the great distance that she must travel to the braille class, she kept the child at home for about six months. The girl finally entered the braille class, two months before the close of the year, made a very good adjustment and seemed normal in her reactions. She made very good progress in her braille work. After a year and a half in the braille class, the teacher reported that the child was reading print library books at home. This was called to the attention of the school oculist, who felt that the vision did not justify transfer to a sight saving class until the operation which the doctor had suggested had been done. The mother who had been repeatedly urged to take the child back to her doctor, now did so. During the semester the doctor corrected the condition with glasses with sufficient improvement in vision to justify her transfer to the sight saving class

at the close of the semester. A. has made good progress in the sight saving class.

Case IV.—M. S. at the age of 9½ years suddenly became completely blind in both eyes from cataract. Six months later she was referred to the Braille Class Department, by her doctor, who at that time was operating on her eyes. He expected it would be two years before her eye condition would warrant their use for reading. The girl began to withdraw from normal, social relationship and became depressed and sullen. The mother, an intelligent and understanding woman, helped the child to make a good adjustment to her attendance in the braille class, and within two weeks after her enrolment in the class she had become much more cheerful and had gained 4 pounds.

The first semester showed she made rapid progress with her braille. During this period her operations had been more successful than the doctor anticipated and he was able to correct one eye so that she could be transferred to a sight saving class at the end of the semester. She has made excellent progress since entering the sight saving class and has been double-promoted once in the two and a half years' attendance. Her operations have been completed, and she now has adequate vision, with the use of bifocals, to enable her to use sight saving materials with ease.

Although it is hoped that this girl will never have to make use of braille, yet her placement in the braille class, even in the light of the subsequent improvement in the vision, was justified in view of the emotional adjustment as well as her normal progress in school.

Case V.—A. lived outside of the city limits but her father was anxious to send her to a sight saving class because she was unable to keep up with the children in the regular grades. The superintendent was willing to co-operate in paying tuition because he definitely felt A.'s retardation was due to her low vision.

The eye physician diagnosed A.'s condition as subluxation

of lenses, tremulous irides. Her vision was so low it was a question as to whether she should be placed in a braille or a sight saving class. She was given the advantage of trying the sight saving class first. The psychologist classified her as of normal intelligence.

When A. entered our sight saving class, she had to repeat the first grade. At that time she was very timid and lacked confidence in herself. It was rather hard because the father was on work relief and had to board her in the city.

A. never wanted to join the games with other children. She preferred to do things by herself. She never complained and never showed any special enthusiasm for anything. After she had been in a sight saving class a year, she began to show an interest in activities. She gradually joined in the games with the other children without any special effort on the part of the teacher or the children. From the day she entered the sight saving class she did very good work at school. The first two years she did three years' school work, so that she made up the work she had lost in the regular grades.

When A. reached the upper grades the teacher did not complain about A.'s not being able to cover her work. However, each time the doctor checked her vision, he secured lower vision than was usually considered adequate for sight saving work. When she was asked to read it was found that she was able to make use of her near vision in such a way that she could read the large print without too much effort. A. reports she uses only one eye for reading. There is very little difference between the two eyes, but from A.'s statement, she uses the eye that has less distant vision for her close work. No matter how small the print is nor how large the print, A. has to get just as close to the work to see it. At the present time she is in the 6A grade and has a class standing in reading of seventh year.

If, in the future, she should at any time need to learn braille we think she would come to us and let us know. She is an intelligent, capable child and we are sure she would learn

braille quickly. She recognizes her eye limitations and is willing to face the problem without fear.

Case VI.—S. was referred to the Sight Saving Department due to myopia. The psychologist found her to be of very superior intelligence—I.Q. 155. In the first grade she completed two years. After that she was given an enriched program so as to avoid too rapid promotions. Her mother was very co-operative and understanding. During S.'s five years in the elementary grades her myopia did not increase. At the time of referring her, her eye physician stated, "This is certainly a case in need of sight saving training for prevention of further increase in myopia and we are very glad to recommend her to the sight saving classes." When she completed her elementary school work her oculist stated that there was no increase in her myopia and recommended the same care be continued. However, if her eyes continue to remain the same he thinks she can enter high school without any special care. S.'s mother had stated a number of times the doctor told her he felt that the attendance in a sight saving class was responsible for no increase in myopia.

At the time S. entered the sight saving class she was very much of a problem because of too much attention at home. The mother was co-operative with the Sight Saving Department and expressed her appreciation of the development of S.

S. is now completing the 9th grade. She has developed into a very fine young lady. Her mother said the doctor had told her S. can enter the regular grades next year because of no increase in myopia, and he feels she knows how to make the proper use of her eyes. All through her school years she has had fairly good vision with her correction.

Case VII.—D. was referred to the Sight Saving Department due to the fact that his myopia had increased three diopters in one year. He had normal vision with correction. At this time he was 8½ years old and in the 4A major work class. His I.Q. was 147. In the five years that he has been in the sight saving class he has increased one diopter in myopia.

D. has made normal progress in school. His mother and father have both voluntarily come to the office to express their appreciation of the sight saving work. The father also said they have followed very carefully any home instructions the sight saving class teacher has sent. He reported that due to the influence of the sight saving idea they have had their home lighted according to instructions from a lighting research laboratory and that D. has a student lamp.

D. is to enter senior high school next semester. The vocational guidance counsellor at the senior high school D. is to attend, said that the student who acted as his secretary in making out programs for the 9A students who are entering next semester, stated that D. was one of the nicest students he had interviewed.

The above cases may serve to bring to attention the educational placement and adjustment of the visually handicapped child as a case work problem involving many factors—physical, educational, emotional, social and vocational. Only a study of the child as an individual can be satisfactory. No very definite rules or standards for placement can be evolved. In some instances instead of the "exception proving the rule," the exception is the rule. For example, we no sooner say that the prognosis of the case should be considered in placing the child, than we give an example of the child (Case IV) who was placed in the braille class when it was known that an operation was to be performed. This placement was made from the standpoint of the child's emotional adjustment. She was put in the situation where she could succeed educationally and the results for the child were very satisfactory.

The parents' attitude must also be considered. Sometimes a cataract operation for a child will be speeded up by placement in a braille class. If placed in a sight saving class, the operation might be postponed. These parental attitudes which have a bearing on a desirable end result, should be determined and given their share of consideration.

The education of the parent as to the child's handicap is exceedingly important and of major interest to those engaged

in the field of social work. Therefore, the ultimate objective of social workers in this field should be to work for co-operation between parents, teachers, school administrators, and eye physicians. A thorough knowledge of all these factors will lead toward a satisfactory personality and educational adjustment for the child in the sight saving program.

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Some Advantages Offered Children in Day School Classes for the Blind in the Public Schools

George F. Meyer

"Mr. A—, I am so thankful we can now keep our little girl at home, without depriving her of the opportunities of an education." These were the words of a devoted father who thus prefaced his expression of appreciation to the superintendent of a school system, who had just secured the establishment of day school classes for the blind in his schools. He may or may not have realized that there were other advantages growing out of the education of a blind child in his home community. To that father, however, the outstanding advantage of the new class for his daughter lay in the fact that the child would not now have to be separated from her parents. So to most people this is the one great advantage of educating the blind child at home, and this advantage is quite sufficient to fully commend the plan in the minds of most people. The desire to maintain family integrity and to keep those we love near us is so instinctive as to elicit a sympathetic response from every heart. Hence, the point scarcely requires elaboration here. But there are other advantages in such a plan of education which appeal quite as much to the head as to the heart, and it is to these that I shall devote the paragraphs which follow.

The lay reader may be interested to know that up to the beginning of the twentieth century, there was only one recognized plan for the education of blind children, namely, the residential school plan. According to this plan of education, all blind children in a given area (usually a state) are brought together at a central institution, there to be maintained at state expense during nine months of each year, for purposes of

instruction. In 1900 the first day school class for the blind was established in the Chicago public school system. Since that time, the number has gradually increased until now, nearly a score of communities throughout the country offer educational opportunities to these children.

For the benefit of those unfamiliar with the way in which the education of blind children is conducted in the public schools, a brief résumé of the plan in general operation may be helpful.

One or more schools strategically located, as to transportation, etc., are designated as centers for the education of such children. A suitable room centrally located is set aside for their exclusive use, and equipped to meet their needs. A teacher, usually of superior merit, is placed in charge of a class of from seven to nine blind pupils. These children are assigned to their respective grade classrooms, and attend the regular grade classes for that portion of their work in which they can profitably participate. Instruction in reading and writing braille, in handwork, in typewriting (to this the child is introduced as soon as practicable), and sometimes in arithmetic, together with all preparation and adaptation of subject matter, is carried on under the direction of the braille teacher. Special instruction in various types of music (particularly instrumental), in manual training and in domestic arts is offered in some systems.

In the high school the work is carried on according to much the same principle as in the grades, except that the pupil is thrown more and more on his own resources in the preparation and conduct of his work.

Frequent home visits, sometimes by trained teachers or social workers, assist the family in meeting those needs which only the family can meet. Some systems have carried on special summer school classes, to broaden the educational horizon of these children, and to furnish certain types of training for which sufficient time and opportunity may not be available during the regular school year.

While the advantages of this type of education may be classified under various heads and in various ways, I have

chosen to consider them, first, as those which naturally group themselves around family life; second, those which group themselves about community participation; third, those which have to do with vocational inspiration and choice; fourth, purely educational advantages; and fifth, certain broad social advantages.

Authorities have agreed that the wholesome home is the ideal place for the rearing of children. If this be true of the child who is possessed of all his faculties, it should be even more essential to the well-being of the blind child. When I refer to the home, I do not mean merely the influence of mother and father, and the guiding care which they may or may not exercise over the growing child, but I mean that combination of both tangible and intangible elements, which go into the life of the child and make him what he is.

From the economic aspect the blind child who grows up in a normal home, if the income be small, as it usually is, learns the value of a dollar in a way which could not be instilled through a thousand lectures, or through any regulation of personal expenditures. He learns it from the parental paycheck which must be stretched to the breaking point, from the modest dwelling which is his home, from the meals which must be carefully planned to fill several hungry mouths, from care of clothing which must be made to last, and from all the other sacrifices in which he must join the family to make both ends meet. This situation is not something to be viewed from the sidelines as a visitor for three months during the summer, to be the object of unfavorable comparison with conditions elsewhere, perhaps infinitely better from the physical standpoint; but it is an impression which, by reason of its daily repetition, leaves its mark in the mind of the child. He grows up like his brothers and sisters, to know the parental sacrifices which must be made in his behalf and which he must share when possible.

From the moral and religious standpoint, he comes by imperceptible degrees into the heritage which only the home can transmit from parent to child. His conceptions of sex

relationships come about in a perfectly normal way, and are likely to be free from the distortions which result from unnatural and more or less continuous segregation of the sexes.

The child's social status in the family is in almost every instance a perfectly normal one. I have found this to be particularly true in the case of the girls. This is especially fortunate, since it is generally recognized that in after life a great many of our girls are likely to be most happy in the home. In practically every instance of pinched economic circumstances our blind girls have proven a great assistance in the work of the family, a fact which is not only a great satisfaction to them, but one which paves the way for their continued happiness in their later life adjustment in the home circle.

Important, too, are the ties of blood and friendship which are strengthened both within the family itself, and friendships which are developed outside the home. These ties of family and friends are likely to mean much in the future social and economic life of the individual, their value depending upon the stability of the family itself and its social status in the community.

There is even a vocational aspect to the home life. As our children see the varied activities in which members of the family engage, they are likely to think much more frequently of what they themselves will do when the time comes, to bring in those dollars that mean so much to the family. This assists in furnishing the urge to energetic application which is so often lacking in our blind people at the outset of their economic careers.

And so the advantages that result from normal family life are not one or two, but many, varied, and complex. The purely physical attributes of home life are sometimes, though not always, improved by withdrawing the child, but when this physical improvement must come at the sacrifice of all the other things which go to make up home, character, and permanent life contacts, such a withdrawal from home may even be tragic in its results. Too often children are withdrawn from home at the beginning of their school careers against the

ineffectual protestations of the family, only to find that their continued absence, first painful, later convenient, has made their return an unwelcome hardship to both child and family.

There is, admittedly, no greater socializing influence within the community than the public school. As part of the public school system, the blind child is directly affected by all its influences. The socializing activities in the school in which the blind child participates directly, might logically form the basis for an extended article. Four-square clubs, school police forces, student councils, grade-room government, Hi-Y clubs, student publications, athletics, debating contests, music contests, school assemblies—all these are illustrative of the part he takes in the social life of the school. This list gives some idea of how numerous and varied they may be, and how wide and far-reaching is their influence both upon the blind child and those about him.

Nor are the socializing activities of the school the only ones which bring the child without sight in closer contact with the community and strengthen the ties between him and its sighted members. The part he takes in promoting the Community Chest, the Junior Red Cross, the Scout and Y.M.C.A. activities, the activities of the Park Board, such as community sings, pageants, sports, etc., radio contests of various types—all these things make him feel that he is a normal member of his community, taking a normal part in each, and giving and getting the benefits which are a part of such participation. These are not activities which are given artificial stimulus of one kind or another, or which are viewed with interest from afar, but they are made a vital living part of the daily life of the child, affecting him just as they affect his neighbors and friends. May I hasten to add that the activities mentioned are not hypothetical, but are selected from those in which our pupils have actually participated. It must be borne in mind (and this is important) that these activities have all resulted from the individual initiative of the children, and not from any undue urgings on the part of the teacher or school authorities—one

of the most concrete evidences of the contagion of community spirit.

Apart from the learning of an occupation, there is much which goes into vocational preparation, which is of an intangible character. In the life about him the blind child in the public schools is daily subjected to influences which mean much to him vocationally.

As mentioned before, the economic pressure, which is all too universal in the home, is a constant goad to his realization that he must some day earn as do those about him. The fact that his brother gets a job makes him want one. The fact that all the rest of the boys and girls are working during the summer vacation makes him feel that he should do something.

One of my boys, of whom I least expected it, was so stimulated by the example of those about him that, the summer following his completion of the eighth grade, he earned more than sufficient to buy his clothes. The next summer he did even better, while the business experience, the sagacity for business detail, and the self-confidence he acquired were invaluable. The marvel in this case lay not in the fact that the boy worked during the summer vacation (most of our older boys do this), but that a boy of his type and temperament should be so stimulated.

The meaning of competition has a deep vocational significance. In his daily class work the child learns the lesson of competition with sighted individuals of his own age, grade, and intellectual power—a competition devoid of favoritism, which stimulates a self-confidence that is difficult to develop in any other way. When he earns an *A*, he knows he has deserved it, just as truly as he knows he has deserved the *D*, which may be his on another occasion.

With the freedom which comes from ordinary home life, the boy or girl who earnestly thinks along vocational lines, has the opportunity for observation and consultation which cannot be afforded to the child away from home. He makes contacts with friends or persons he hears about in various

fields of endeavor, and gains from them discouragement or stimulus, as circumstances warrant.

He may even gain informal exposure to his chosen field, as did one of our boys who after completing his early schooling studied for the ministry. He thought long and intensely over the possibilities of entering this field, and the inspiration he received from contacts provided in his home community were very largely responsible for his interest in his profession, and doubtless proved a determining factor in his success. Through one of these contacts, he assisted one of his ministerial acquaintances, for a time, and thereby gained first-hand knowledge of the field during his training period. I should like to give further instances of this aspect, but space does not permit.

Perhaps one of the most important, and at the same time the least tangible aid to success in a vocation, is the ability to adjust himself to ever-varying conditions. In the case of the blind, the problems of adjustment are even more complex than those of the sighted.

Although deprived of his vision, his greatest asset and aid in the process of adjustment, yet the blind individual must be even more versatile in his adaptation to things about him than his more fortunate sighted brother. Obviously one of the greatest training factors in the making of adjustments is the constant repetition in the meeting of new conditions and the gaining of confidence in meeting them. It is not too much to say that in this particular, the day school pupil who is blind receives infinitely more training than the pupil with sight, and it is well that he should. From the time that he leaves home in the morning and boards his car, through the whole day's experience, he must make one adjustment after another. No two of these adjustments are likely to be made under identical conditions, and in every one of them he is put on his mettle. When he reports to the regular classroom, to recite with his class, he must make his physical adjustment in finding the room and his place in it, and he must make his own adjustments to every part of each of the recitations which follow through the day. To be sure, his room teacher is at hand to

assist him in making those that are too difficult, but more and more as he grows up these details are almost automatically taken over by the pupil until in the high school only the weaker students require assistance. Whether it be in the regular classroom, on the playground, on the street, on the car; whether it be at home, in some public place, or in his own backyard, the blind child must make his own contacts and meet his own problems. Sometimes he is unduly favored, sometimes he is discriminated against; sometimes he is pampered, and sometimes he is wounded by unkind gibes and thrusts: but every one of these conditions, good and bad, positive and negative, is characteristic and illustrative of life itself, and he sometimes learns as much from his failures as he does from his successes.

There are a number of educational advantages which are peculiar to the day school class for the blind. A child learns much from the discussion and exchange of information which is likely to come about in a well-conducted recitation in a class of forty. His mental contacts are tremendously multiplied. In a competitive way, he must pit himself intellectually, not against a class of six, eight, or ten, but against a class of forty. By reason of his handicap, even if keen mentally, he is likely to be obliged to work up to capacity—a most wholesome bit of mental discipline for any child.

The methods in use in the public school classes for the blind not only encourage analysis of individual needs, but, by force of necessity, make this the only standard of teaching in the Braille class. This individual consideration makes it possible to pass the child on as rapidly as his mental attainments permit.

Added to this is the advantage which accrues from the fact that day school classes for the blind are, in general, organized only in the most progressive systems, and these classes must, of necessity, reflect the energy which these systems put into the improvement of their teaching methods.

All these things make it possible for a day school pupil to complete his education at an earlier date than is generally

possible for blind pupils, so that graduation from high school at ages from fifteen to eighteen is not unusual for pupils who have been in the day school system for most or all of their school life.

The cultural development of a child in the day school system is limited only by the broad facilities which are made available in the cities where these classes are organized, and the energy which the school exercises in bringing these forces to bear upon children whose parents are unable or unwilling to expend their energies in this direction.

Like the cultural opportunities, the opportunities for vocational preparation and placement are limited only by the economic opportunities afforded by these large centers of population, and as in the case of the cultural advantages, the benefits to these children depend very largely upon the aggressiveness of the policy pursued by the school system in their behalf.

There are two other advantages which accrue, not only to those who attend day school classes for the blind, but also to the great mass of the blind who live in centers of population maintaining such classes. The first of these is the increased familiarity of the public with blind people and their problems. The public will be much more intelligent in its handling of the problem of the blind when it knows the blind better. Nothing could be better calculated to acquaint it with the capabilities of our blind people, and nothing could be more effective in doing this than the constant multifarious daily contacts between our young blind people on the one hand, and the public, both in and out of school, on the other.

The second of these advantages is the more wholesome attitude which our blind people from the day schools are likely to assume toward their relationship to society as a whole. Our day school children from the beginning develop the concept that they are, primarily, citizens of the school or of the community, and only secondarily, blind: in contradistinction to the concept now held by so many blind people, that they are, primarily, blind individuals, and secondarily, members of the greater whole.

As a bit of social philosophy, these two concepts have a far-reaching effect, not only upon the blind people themselves, in their efforts to earn a livelihood, but in the part which society is expected to play in furnishing means of support. Needless to say, these two points of view form the basis for happiness or unhappiness in the normal life contacts of the individual, determining as they do the question as to whether the blind individual will seek his happiness and inspiration from the sighted friends about him, or whether merely tolerating these associations, he puts them aside whenever possible for contacts with other blind people.

In stressing the advantages of the day school plan, I have not lost sight of some of its weaknesses. Its essential weakness, however, lies not in its inherent inability to perform those services for certain of our blind people which are now left undone in all or most of our systems, but rather in the lack of aggressive leadership and the machinery and the technique for doing these things. Most of our public school systems do not offer to their blind children *intensive* and *individualized* corrective gymnastics, and *widely differentiated* courses in music and dramatics, such as are made a part of the regular instruction in the best of our residential schools. However, there seems no good and logical reason why a place for these important educational elements cannot be found in a carefully planned course of day school instruction.

The day school plan of education, as a whole, is still young. Its low per capita cost, as compared with that of residential school instruction, is strongly in its favor, the cultural and vocational resources at its command are almost unlimited, and the early and tender age at which the pupils complete their school work leaves much opportunity for constructive vocational and trade training. Fundamentally, the plan is sound, and as we grow in experience, and as we focus upon its problems the light of impartial investigation and research into its weaker segments, constructive means will be found for supplementing in a material way the present activities of our public school classes for the blind.

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V. PSYCHOLOGY OF THE BLIND

The Psychology of Blindness

SAMUEL P. HAYES, PH.D.

BLINDNESS has always aroused much pity and curiosity, but until recent years it has motivated very little careful scientific study. As blindness is rare, few people have ever known a blind man or a blind child intimately. But chance observation and the recital of anecdotes of surprising actions by unusual blind people have combined to develop a stereotype of blindness which is accepted and passed on as a true characterization of the blind as a whole. Reports, however, do not agree and we find equally warm support for both of the following contrary opinions. One group contends that the blind are "simply folks in the dark"—just like the rest of mankind except for the fact that they cannot see. The other group considers it inevitable that the loss of vision should change all other phases of the lives of the blind. What do we really know? What facts have been established through reliable scientific experimentation?

THE SENSORY LIFE OF THE BLIND

Compensation.—It is a generalization of very long standing that human beings bereft of one sense are providentially compensated by a superior acuteness of the senses remaining. Not only are the blind assumed to hear better, to show keener senses of taste and smell and to excel in touch; they have been seriously credited with the ability to *feel* colors and with a mysterious "sixth sense" by which they are able to avoid obstacles in their path.

Careful experiments, performed upon groups of blind and seeing children who are equal in all other respects than vision, have repeatedly shown that compensation is not a free gift but the hard-won reward of special effort. Many blind people do make better use of their remaining senses in the practical activities of life, but when an unaccustomed demand is made upon them, no superiority in sensory acuity is shown. Blind people often appear to distinguish sounds better than the seeing. Amazing stories are told of blind men who can select a street-car by the sounds it makes and of blind women who fry pancakes by attention to the intensity and frequency of the tiny explosions heard. But when a whole blind school population is tested with an audiometer (a scientific instrument for measuring hearing), the results give a normal curve of distribution: some are exceedingly acute, a larger number are superior, and a still larger group are average, with enough inferior and deaf to balance the superior end of the curve. It is much more necessary for the blind to attend to the sounds about them so that they may keep their bearings when moving about indoors and out. They note voices and echoes and differences of sound intensity which have no such importance for a person with vision. When sound localization is tested in the laboratory, however, with the meaningless click of a telephone receiver as the stimulus, the superiority of the blind vanishes. The ability to read with the fingers the little dots used in braille seems marvelous to the seeing, and perhaps it is. Certainly it takes marvelous *industry* to learn the trick. But careful measurements discover no general superiority in the sense of touch. Mr. Kunz's experience in 1902 with maps for the blind is an illustration of the fallacy of compensation in the field of touch. "I had also often read and heard," he writes, "that the blind are able to distinguish the most infinitesimal unevenness in a body, which would entirely escape the touch of a seeing person. I consequently expected unreasonable things from the sense of touch of my pupils."

Later, when he was asked to prepare maps for the blind, he says:

". . . I was not a little proud to print very sharply defined embossed or raised lines of rivers, cities, and boundaries. I examined the maps with closed eyes, and was able to follow every line with the points of my fingers, which had become hard by the continuous labor of engraving in hard wood. But when I tried to use these maps in the instruction of a class of intelligent older girls . . . the sense of touch failed. They did not find their way on the map. . . .

"At that time the maps had been sent for examination to nearly all European institutions for the blind. . . . Very nearly the same replies were received from all: 'Beautiful, but too fine'; 'Splendid, but not accessible to touch'; . . .

". . . I had the same experience with zoological and botanical representations, and especially with those used for instruction in physics. Entirely new forms had to be prepared repeatedly before the required accessibility to touch was reached."

His practical experience having contradicted his earlier belief in compensation, Kunz then turned to science for light and welcomed to his school Professor H. Griesbach who undertook a comparison of the blind and the seeing in their three chief senses—hearing, smell and touch—with improved instruments and modern experimental technique. Griesbach found no evidence that the blind have a more acute sense of touch than the seeing, his experiments with the aesthesiometer leading to just the opposite conclusion. A generation later the problem was again attacked in an interesting way by Professor C. E. Seashore of Iowa State University. He attempted to compare the efficiency of the blind and the seeing in a totally unlearned activity involving a use of active pressure in a manner similar to its use in every day life. His plan was to determine under how many thicknesses of paper the position of a wire hair could be located by exploration with the tip of the first finger. The apparatus consisted of a plate glass disk 10 cm. in diameter mounted so as to revolve

freely. A copper wire about the diameter of the average human hair was stretched across the plate glass, and the ends firmly fastened. Disks of paper cut from Old Veda Bond were placed over this wire, and the blindfolded observer was required to locate the wire by touch. Starting with ten sheets, five sheets were added for each trial until a failure occurred; then a single sheet was taken off or added until he had determined the greatest thickness through which the subject could locate the wire. The record is therefore given in terms of the number of sheets of paper covering the wire. To one who has not performed the test, the actual results will seem to be very wonderful achievements. In this test much depends upon correct procedure in hunting. The observers were therefore carefully taught how to proceed: e.g., to run the tip of the finger from left to right, and if the wire was not found in that stroke, to run it in a line at right angles to the first; the wire having been found by such a method, it was comparatively easy to trace it. If it was not found in the first two strokes, these cardinal movements were continued until the observer acknowledged failure. This test seems to measure just the ability which would be used in such activities as detecting the margin of a printed page by touch, reading raised print through several thicknesses of paper, or playing the piano with a cloth spread over the keys, quoted by Hawkes as examples of the fineness of touch developed by the blind. But Seashore found the blind inferior to the seeing in this test. The average attainment of the blind was 26 sheets against an average of 30 sheets for the seeing. The highest record by a blind subject was 38 sheets. Four seeing subjects did better than this, finding the wire through 40, 41, 45, and 48 sheets respectively. The poorest record for the seeing was 18 sheets, for the blind 10.

Similar results have been obtained in other scientific measurements of compensation: in tests of ability to distinguish weights by lifting; to identify slight pressures upon the skin; in measurements of tactual space discrimination by the method

of two point stimulation; of taste and smell sensitivity; and of sensitiveness to changes in temperature.

As the general result of his own series of experiments, Seashore concluded that there was no significant constant tendency in his records proving superiority either for the blind or for the seeing, and our other experimental evidence points in the same direction. "The extraordinary skill in guidance," he says, "through hearing and pressure and other senses in the blind has its basis in apperception rather than in sensation. . . . The person who reads the point print has learned to give meaning to sensory impressions which the seeing person tends to neglect although possessed of the same power as the blind for sensing differences."

Dr. French summarizes the whole question very well. He writes:

"The common opinion that the loss of one sense renders the others keener has now rather definitely been put to rest. Fairly conclusive experiments and the reliable testimony of blind persons all tend toward the reverse conclusion, namely, that the loss of sight is accompanied by more or less impairment of the remaining senses and not by increased sensitivity. . . .

"No definite limit can be set to the powers of the senses, because the factor of educated attention has no such limit. What the blind person lacks, first, in totality of impressions and, secondly, in the acuteness of those impressions that he has, he may make good to a very great extent by attentiveness, conscious or unconscious, to what is given. This applies particularly to the sounds, the interpretation of which is of so much more vital importance to the blind person than to one who can rely on sight. Thus, intonation, tricks of speech, and the like, become exceedingly meaningful; the well and the sick voice betray to the blind man the physical condition of one talking to him;* and so on through a vast

* Recent experiments carefully conducted over the radio, indicate that the blind are no more successful than the seeing in judging character from the voice alone. Cantril and Allport, *The Psychology of Radio,* New York, Harper & Brothers, 1935, pp. 121-122.

number of gradations, insignificant, because practically useless, to the one with sight. There is increased significance, too, in the texture of a glove, the feel of a handshake, and in personal odors to one who dwells in darkness and must from these very things build up or reconstruct his objective world and his world of social life."

May we now bid farewell to the dogma of sensory compensation? We all acknowledge that the blind do surprising things with hearing, smell, and touch, but careful measurements do not show that they are superior to the seeing in fineness of sense discrimination. Their attainments must therefore be the result of long-continued, attentive practice since equally surprising feats are performed by the seeing under similar necessity.

Facial Vision.—Even more puzzling to the seeing is the surprising freedom of movement shown by the blind, their avoidance of obstacles in their path and their miraculous escape from injury in situations in which vision seems essential. And the inability of blind people to explain just how they accomplish these feats, has led many observers to assume that they possess some mysterious power not shared by the seeing. This special ability has been a favorite topic for comment and experimentation for at least one hundred and fifty years, and we still lack a universally accepted explanation, though many facts have been established. Highly fanciful hypotheses, often bordering on the occult, have vied for acceptance with the biased theories of amateur experimenters, and both have outshone the modest discoveries of trained scientists. Numerous anecdotes are at hand which seem to prove that some blind people can avoid obstacles surprisingly well and the earlier experiments gave support to this belief. But very few extensive surveys have been conducted with scientific controls. The commoner practice has been to select as subjects those individuals who claimed to have this special ability and then to experiment with them by eliminating one sense avenue after another. Apparently

theory has often directed the procedure and prejudiced the interpretation, for many of those espousing one or another explanation have been unable to view with calmness any data contrary to their own, and certain of the experiments seem to have been planned to establish a theory rather than to determine the facts, regardless of their effect upon the hypotheses which initiated the experiments.

It is possible to distinguish several distinct trends in the study of the obstacle sense.

(1) There is a persistent inclination to regard this ability as a true sense achievement, the heightened response of some yet undiscovered sense-organ under the guidance of selective attention. Popular psychology located the "sixth sense" in the forehead and its experimental advocates offer evidence for facial vision.

So we have a set of pressure theories, according to which the sense of obstacles becomes "facial vision" due to the impact of the air upon some part of the face;—obstacles perhaps pushing back a column of air against the skin, or upon the tympanic membrane of the outer ear. We have auditory theories, based upon an assumed superior sensitiveness to echoes and reflected tones, which may be analyzed unconsciously and so determine the position and direction of objects by differences in pitch; and we have temperature theories which would attribute to the face the power of detecting differences in temperature of objects at a distance.

(2) When the obstacle sense is explained as an interpretation of cues from a single realm, or through a combination of sensations, we enter the field which psychologists call perception. One author concludes that as a blind person walks about, alert to impressions which may indicate danger, any changes in sounds may serve as cues from a distance, warning him to direct his attention to the slight facial sensations of pressure and temperature which experience has taught him to expect when approaching objects.

As perception, the sense of obstacles must be distinguished from sound localization and from orientation of the body in

space. Some of our experimenters have attempted to describe the origin and development of the sense of obstacles in the child. There is a difference of opinion about its acquisition by adults, Kunz reporting that he has not found a single person who acquired it after being accidentally blinded while Villey says that among the sixty-three soldiers who replied to this question, forty-two indicated that they had the power of perceiving obstacles although they were adults when they lost their vision.

(3) Dolanski, latest important contributor to the problem, suggests that we are not dealing with a simple sensory response to external stimulation, but with a much more complicated process. Sensory cues which may be so slight that they are subliminal (hence difficult to catch and study introspectively) arouse fear which expresses itself in an instinctive way, causing the involuntary contraction of tiny muscles under the skin. The sense of obstacles, then, is the interpretation of sensations in the skin, aroused when we sense external cues that suggest danger and so cause fear.

Further progress on the problem awaits extended research based upon the best contributions thus far made. A tentative program should include: (a) Careful observation of the evolution of the sense of obstacles in little children and in subjects of all ages blinded by accident. (b) Extended laboratory experiments with large groups of unselected blind subjects matched with seeing subjects of equal abilities aside from vision. (c) Careful standardization of experimental procedure with control of all variable factors, the mental states of the subjects such as attention, distraction, practice, expectation, suggestion, and the environmental factors such as the size and shape of the room used, with calculation of the reflection and absorption of sounds, noises from extraneous sources, temperature, drafts and currents of air, and materials used on the head. These experiments might well be carried on in sound-proof and draughtless rooms. (d) Physical measurements of the stimuli assumed to arouse the sensory responses in the subjects.

The methods of science may seem slow and ponderous, but they offer the only corrective for the popular psychology of conjecture founded on easy generalization from the data of casual observation.

The Memory of Blind People

The "wonderful memory" of the blind is proverbial. The blind poet of ancient Greece, the Japanese college of blind historians, blind musicians with incredible repertoires, and occasional prodigies who can recite any part of the Bible at will are cited as proof. Even experienced superintendents in schools for the blind have given testimony in support of the belief, though teachers of spelling generally vote on the other side. When the Binet intelligence tests were first used with blind subjects, early investigators assumed that the blind would surpass the seeing, and placed the digits tests in earlier years for the blind. Apparently the "fallacy of the single case" has long prejudiced our opinion of the memory of the blind, so that occasional striking examples of superior memory have led us to believe that superior memory is a characteristic of the blind as a class. S. C. Swift gives us a paragraph which might serve as a corrective. "A person without sight recognizes a voice he has not heard in years, and his memory is instantly hailed as marvelous. The seeing person thus recognized fails to realize that his own visual recognition under similar conditions is every bit as wonderful, and that a blind man is quite as liable to forget a voice as he himself is to forget a face. Pupils in schools for the blind often cause visitors to stand in open-mouthed astonishment at the ease with which historical events and their dates are recited, musical selections rendered, mathematical problems solved, etc. The visitors forget that they themselves are frequently familiar with the same dates, that every properly trained seeing musician plays from memory and without looking at his instrument, and that in the every-day business of life, they themselves solve problems of much greater difficulty without the

use of pencil and paper. A blind typist is seen operating a machine with speed and accuracy, and his memory is praised and talked about for years thereafter. The witness of the marvelous feat employs a stenographer in his office, but he has forgotten that the touch system was used in her instruction and that the keys of the machine are never looked at."

Relatively little experimental work has been done directly upon the memory of the blind, but a beginning has been made, and such memory tests as occur in the Binet intelligence scale have been used with large numbers of blind children.

To date we have results (1) of the simple immediate rote memory of the blind from the use of the Binet digits tests and the reversed digits tests, with more than 3000 blind school children, and from the use of the Pressey group test of immediate memory for disconnected words with more than 600 blind children in 10 schools; (2) of recall memory for words, nonsense syllables, letters and digits with small groups of blind pupils in single schools; (3) of the Binet logical memory tests for related words, words in sentences and brief stories from more than 3000 blind school children, of Pressey's fire story with 654 blind children in ten schools, and of two of Pyle's stories, scored for ideas in three schools for the blind. Our review of the evidence does not reveal any general compensatory superiority in the memory of blind children. In rote memory, where we have the largest number of cases, we find the blind excelling in the short series of digits forward and the long series of digits reversed. They seem to do better than the seeing with nonsense syllables but not so well with real words. In tests of logical memory, equality rather than superiority seems to be the verdict. It would appear that where there has been a need for special attention, or a motive for retention, the blind have learned to make better use of their native abilities, but that they succeed no better than seeing children might do if equally interested. In memory, as in sensation, compensation is not a gift but the reward of persistent effort.

The Intelligence of Blind Children

Binet's attempt to measure the intelligence of French school children at the beginning of this century started a movement which quickly spread to all parts of the civilized world, giving surprising new information about children and raising many puzzling problems for the scientist. We do not yet know what intelligence is, in itself, but we have had considerable success in devising methods by which we can select children who will be most likely to act in such a way that their teachers and employers will judge them to be intelligent. In the first enthusiastic use of Binet's tests, many grave mistakes were made and many extravagant claims perpetrated. At present we do not look upon an I.Q. as the last word in educational or vocational guidance, but having convinced ourselves that an I.Q. has been obtained with due regard to all scientific precautions and that it remains fairly "constant" on retesting, we consider this I.Q. a vitally important adjunct to everything else we can learn about a child's status, including his family background, health, school record and judgments of his personality through impressions made upon superintendents, teachers and house mothers.

After the use of R. B. Irwin's adaptation of the Binet tests with more than 1600 subjects with defective vision in residential schools for the blind, a provisional Binet Guide founded on Terman's revision of 1916 was prepared and used with 746 blind children. Supplementary tests, to take the place of items not feasible for testing the blind, were tried out upon 418 children. On this basis the Hayes-Binet Guide of 1930 was published and data have been accumulated upon more than 2100 subjects. A limited use has also been made of group tests of intelligence. First the Pressey Group Point Scale and the Pressey Cross Out Test were tried out in two eastern schools and then employed in the survey of seven schools in 1919-20. The Otis Classification Test was adapted for use with the blind and results have been published from 1931 on.

All these tests show a high correlation with the individual tests and serve for a convenient, economical preliminary survey of a school population. Our conclusions upon the intelligence of the blind are based mainly upon the results of the individual tests, though not contradicted by the results of the group tests.

In general, normal curves of distribution have been obtained when unselected school populations have been tested, and retests with the individual tests after two year intervals have shown a reasonable "constancy of the I.Q." Theoretically we had expected to find the average I.Q. of every school to be close to 100: actually the averages in thirteen different schools reporting from 1932-36 have ranged from 108 to 93 I.Q. Whether this means that some schools draw their pupils from better intellectual sources than others, or indicates differences in liberality in the reception and retention of students, or points to differences in the leniency of scoring by testers of different training, we cannot at present determine. An extended study of the pupils entering two large eastern schools, where the directors have exercised a relatively liberal policy toward pupils of modest attainment, has discovered little change from a low level of ability from 1915 to 1935, the median oscillating from year to year slightly above and below 90 I.Q. as a center. For our whole group of schools, involving tests of 1851 pupils, the average of the averages for the total population of each school was 101 I.Q.

Great caution must be used in generalizing about the intelligence of the blind as compared to the seeing, since this question has not yet been a major question for statistical study. In so far as the Binet tests measure functions similar to those involved in school work, one might reasonably expect somewhat lower I.Q.'s than with the seeing. We are accustomed to explain educational retardation from any one of a considerable number of accidental causes such as infantile illness, physical accidents, malnutrition, lack of sleep, unwise home treatment, emotional conflicts due to a sense of inferiority or an unhappy home life, belated admission to school,

irregular attendance or inefficient teaching. Wherever blindness increases such hazards, we may look for their effects in retarded development, and, as explained below, we have at least one line of evidence of such a result in an apparent four point lowering of the Binet I.Q. It will be remembered that in adapting these tests for use with the blind, it was necessary not only to omit certain items which could not be administered without vision, substituting other items which had secured a satisfactory percent of passes in preliminary trials, but also to move into higher age groups certain other items —the vocabulary tests for instance—in which blind children are considerably inferior to the seeing. Preparing record forms upon which only those tests were included which would be applied to the blind and to the seeing in the same way, two sets of I.Q.'s were calculated for 300 children, one set of I.Q.'s from the test items in the age groups in which they appear in the Stanford-Binet for the seeing, and another set of I.Q.'s from the test items in the age groups in which they appear in the Hayes-Binet for the blind. The average I.Q. on the first scoring was a full four points below that on the second. But when the blind are compared with the seeing by percent of very inferior and percent of very superior in the distributions for the thirteen schools, the results for the blind are not appreciably below those for the seeing.

A final caution arises from our present uncertainty on the question whether the populations of residential schools for the blind may be considered to be representative of the blind as a whole since the intellectual level of a school may conceivably vary according to the socio-economic status of the parents of the pupils, and with the racial or national, urban or rural origins, as well as from differences in policy concerning the admission of children with considerable vision.

We have found no evidence of a compensation for blindness through development of superior intelligence, as measured by our tests. It is possible, however, that in adapting to the blind tests which were prepared to test the seeing, there has been too much emphasis upon certain abilities in which

the blind have less chance for superiority and that tests directly created for the blind might give a truer picture of their intellectual status. Their superior use of their remaining senses, their clever employment of obscure sensory cues in the avoidance of obstacles and their efficient adaptation to the need for desultory memory, all point to such a possibility. Perhaps we shall some day find that, after eliminating from our calculations those children whose blindness is caused or accompanied by constitutional defects which may affect also the normal development of intelligence, the remainder make such good use of their innate capacities that they exceed comparable groups of seeing children who are less urgently motivated.

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VI. SOCIAL ADJUSTMENT OF THE ADULT BLIND

Functions of a State Agency for the Blind

EVELYN C. MCKAY

STATE agencies for the general welfare of the blind have been functioning in this country since 1906, when the first permanent Commission for the Blind was established in Massachusetts, and there are now thirty-one states which have activities of this type, and seven others in which similar legislative provisions have been made but are not yet effective.

In view of the rapid development of public welfare activities during the past few years, and the far-reaching changes which have resulted from the passage of the Federal Social Security Act, it seems appropriate at this time to examine carefully the responsibilities of the state toward the blind and the philosophy on which these responsibilities are based.

The underlying theory of the state agency for the blind may be expressed as follows: The state has undertaken to provide certain services for all its citizens—among them the protection of health, general education, vocational training, employment service, and financial assistance to the needy. In the case of blind persons it has been demonstrated that these services are most effectively and economically provided by centralizing them in one state agency which is charged with the responsibility for all phases of the welfare of the blind people of the state. In so doing, the state is not providing any "extra" benefits for the blind which are not available to the seeing; it is merely adapting its organization and procedures to discharge effectively, under the peculiar conditions of blindness, the same responsibilities which it has already undertaken on behalf of the seeing.

That such adaptation is necessary is due partly to the

special problems of blindness, and partly to the comparatively small proportion of blind persons in the general population. One of the most obvious handicaps which blindness imposes is the difficulty of travel alone, and this is likely to cut a blind individual off from many available public benefits because he cannot easily visit the appropriate agency. Indeed, in the absence of easy access to newspapers and other printed information, he may not even be aware that such an agency exists. Moreover, the handicap of blindness requires in many cases the use of special devices and methods of training with which the average seeing person is not familiar. And finally, since the blind are so few in number (probably not more than 1 in 1,000 to 1 in 500 of the general population), their special problems are likely to be overlooked by the general public agencies in the effort to provide for "the greatest good of the greatest number."

The establishment of a state agency responsible for all phases of the welfare of the blind avoids these difficulties. Charged with the welfare of a single group, such an agency can give the necessary amount of study to special problems, can provide intensive service as needed, and can, if necessary, take that service to the blind person instead of requiring him to come for it. Moreover, the state agency is in a position to consider the blind individual as a total personality rather than as an example of some one type of need, and can therefore offer him co-ordinated services designed to meet each of his needs as they occur.

To illustrate: A blind person, being without means of support, may apply for financial assistance, the solution to his most pressing problem. If the agency to which he applies is concerned only with administering public assistance, his immediate need may be relieved, but, from the standpoint of his future, he is little better off. If, however, the agency is charged with responsibility for helping him to make a satisfactory adjustment of his whole life, it will be in a position to provide, in addition to immediate financial relief, medical service, vocational training, or employment (according to the circumstances of the case) by which he may be restored to

self-support and enabled to carry on his independent life again.

Acceptance of the theory of state responsibility for services to the blind involves a corollary—namely, that such services should be available to all blind residents of the state, each according to his need, irrespective of age, race, economic status, or any other consideration except blindness.

Blindness is no respecter of persons—it comes upon infant and grandfather, upon white and negro, upon banker and beggar alike, and even the most intelligent and well-to-do require some assistance in meeting the problems it brings. These problems will vary greatly in number and complexity. Some people, given a minimum of special information about the use of braille and various other devices, will make their own adjustments and return to their normal lives; others will need every type of service and intensive follow-up to keep them from disheartened lethargy. But whatever the problems, it becomes the state's responsibility to provide adequate and appropriate services to solve them, to the end that the blind individual may have, so far as possible, as full, active, and independent a life as he would have had if he could see.

Such a philosophy does not involve special benefits for the blind; it merely provides means by which they may obtain and enjoy the benefits the state already provides for those who see.

If we grant that the responsibility of the state is as outlined above, the next question to be considered is the practical measures by which this responsibility may be effectively discharged. Among the activities of the state in this connection may be mentioned the following:

1. Complete registration of the blind people of the state so that the extent of their varied needs may be known and plans made to meet these needs adequately.

2. Determination of the degree of blindness of each person registered and of the likelihood of improvement or restoration of vision by appropriate medical or surgical care, followed by assistance in securing such care for those who can benefit by it. It is unfortunately true that some blind persons have

received services of various kinds from agencies for the blind for years, only to find that their sight might have been restored in the beginning by suitable treatment or operation.

3. Education of the young blind. While the actual education of children of school age should probably be carried on under the state department of education, the responsibility for seeing that every blind child has an opportunity to receive an appropriate education remains with the state agency for the blind, as does the responsibility for the training of children of preschool age through co-operation with their parents.

4. Re-education of the adult who has become blind after school age is past so that, by the use of embossed print and other special devices, he may accomplish the same results as his seeing neighbor. Such re-education is often carried on by teachers who visit the adult blind in their homes for individual instruction.

5. Vocational guidance and training of young blind persons and blind adults. It is now generally recognized in the seeing world that the proper selection of a vocation and adequate preparation for it are important factors in occupational success and financial independence.

6. Employment service for those who can compete with the seeing in regular industry or in an independent business or profession, and the provision of sheltered employment for those who lack the ability or the opportunity to compete successfully.

7. Direct financial aid according to need for those who cannot be self-supporting and who have no relatives legally responsible for them.

8. Prevention of blindness activities. By virtue of the fact that the division for the blind is closer to the problems of blindness than is any other state agency, the division for the blind is a natural starting point for preventive measures.*

* There are also other phases of a prevention program, involving matters of public health, education, industrial management, etc., and it appears that the prevention of blindness activities cannot be limited to one state agency. What is needed is a co-ordinated program in which all state activities in this field can play their respective parts.

9. Education of the public to realize that blind persons are individuals, not a "class," that they are capable of leading normal, active lives, and that ignorant pity and ill-advised "charity," injure rather than help them.

In the administration of such varied services, the case work approach is essential, (1) in order that each individual may be helped to find the appropriate solution to his problem, and (2) in order that the individual himself may become more capable of solving his own problems without assistance.

At this point it is perhaps pertinent to consider how these activities may be organized and where in the state government they may be set up in order to function effectively. Thirty years ago, when state welfare activities were more limited than they are now, and when recognition of the state's responsibility toward the blind was just emerging in the public mind, it seemed expedient to establish independent state agencies (usually called "commissions") for the blind which assumed the duties incident to all the varied phases of a comprehensive program for the blind. As the activities of state governments expanded, however, and more attention was given to the details of administrative economy, there was a growing feeling that too great a number of small separate state agencies was undesirable, and, as a result, in some states the existing commission was made a division of a larger state department, usually the department of welfare, but sometimes the department of education.

With the suddenly increased importance of state departments of welfare, following the passage of the Social Security Act, the present tendency is to establish the state agency for the blind as a division in this department. There are several factors which seem to make this policy advisable. In the first place, although a program for the blind involves matters of health, of education, and of employment, the procedure by which these problems are satisfactorily solved is essentially a case work procedure, and as such will be most easily carried out in a department which is accustomed to deal with prob-

lems involving the adjustment of the total personality on a case work basis. A further reason for placing the services for the blind in the department of welfare lies in the fact that public assistance is usually administered by that department. There may be some difference of opinion as to whether financial aid to the needy blind should be administered by the division of public assistance or by the division for the blind; but there can be no disagreement as to the importance of close co-ordination between the provision of financial aid and the provision of services to the blind, a co-ordination which can scarcely be effected unless the two programs are administered, if not by the same division, at least in the same department.

It is assumed, of course, in making this assertion, that the state department of public welfare is concerned with public welfare in its broadest sense, and is not limited in its activities to the mere doling out of grants of financial aid.

Throughout this discussion we have spoken of "the state" more or less in a generic sense. It is apparent, however, that in many states of large area and scattered population, the state department of welfare cannot actually discharge all of its functions itself, but must delegate some or all of them to county departments of welfare under its supervision. How far it is practicable to delegate services to the blind to county workers has not yet been determined, but at least two things are certain; (1) that, if such delegation takes place, the county workers must be well informed regarding the special problems associated with blindness, and (2) that, in the last analysis, the ultimate responsibility must remain with the state. In view of the special skills needed in some phases of work for the blind, and in view of the small proportion of blind people in the total population, it seems likely that certain services will always have to be provided on a state, rather than a county, basis.

It may be remarked in passing that probably no state agency for the blind in the United States is at the present time adequately fulfilling all of the functions enumerated above as

belonging to the state. State appropriations have in general been insufficient, and, under the handicap of inadequate funds, state agencies have been compelled to restrict their activities in various ways. Some have limited their services to certain geographical areas; some have delegated their functions to unsupervised, privately supported agencies; some have been inclined to serve only the blind who were below or close to the poverty line; some have developed one or two phases of the program at the expense of other equally important activities.

That it is necessary to "cut one's coat according to one's cloth" temporarily at least, every one will concede, but is it not possible that we have been too resigned to financial limitations and inadequate funds? When the public has been educated to realize that the provision of certain services to the blind is as much the proper function of the state as the provision of schools, highways, or public health, and equally deserving of adequate financial support, then only can we hope to see the blind enjoy the benefits which are their right as citizens of the state.

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The Adjustment of the Newly Blind

Beatrice F. Holtzer

The Eye Institute of the Medical Center in New York City has undertaken a new phase of work in its social service which merits attention and careful analysis. In conjunction with the WPA, an experiment was tried in the immediate adjustment of the newly-blind patient by a blind social worker.

Dedicated to the theory that it is imperative that a blind person remain as normal as possible if he is to maintain his place in society and to live a full and rich life among his fellowmen, we were convinced that no time should be lost before the work of adjusting the newly-blind person begins. We felt that a solid bridge must be built between life with sight and life without it, so that the patient may not drop into the gaping chasm of despair and helplessness. We felt that the bedside was the fit time and place to begin, before paralyzing attitudes and queer mannerisms have had time to set in. We felt, too, that someone without vision, who could speak with authority and out of experience, could best help the patient to forge that bridge.

It may be objected here, that there are organizations for the blind, equipped for just this service—the rehabilitation of the blind. True. These organizations, however, do not usually begin their work in the hospital, or even immediately after the patient leaves the hospital. Yet, it is at the crucial moment when, horror-stricken, the patient discovers that he is not going to be able to see, that it is important that there be someone, sympathetic and understanding, who has the ability to convince him that blindness need not mean a negation of life. The patient must not be permitted to sink into apathy or inconsolable grief, nor to become bewildered and fearful to face the world; instead he must be made to realize

that blindness is only a handicap, and, most important of all, a handicap which can be minimized to a remarkable degree, largely dependent upon the attitude of the blind person to himself and his blindness.

Not only is it necessary at this stage to keep up the patient's morale, but a certain amount of training should be started, to spare him much wretchedness and heartbreak; he should be taught to do little things for himself so that the overwhelming feeling of helplessness may be in a measure dispelled. One patient, for example, began to feel more like her "old self" when she was shown that she could herself answer the letters she had received at the hospital, instead of dictating them. She was shown how to use a script board to keep the line straight, and used it. The nurses were delighted at the change which took place in the patient. She not only looked brighter as she sat in the solarium writing to her family and friends, but she did everything else in a new spirit. She no longer felt so cut off from her old world. Was she not writing letters as she had always done? Most important of all, her interest in adjusting herself to life without sight had been aroused.

The Talking Book, too, is useful in this connection for it not only diverts the patient's attention from his "misfortune" and makes the weary dragging hours easier to bear, but by learning to perform such simple motions as the manipulation of the Talking Book machine, inserting the needle, changing the record, the patient gains confidence and experiences a glow of satisfaction at this attainment.

Not only must a wholesome attitude toward his blindness be instilled, but the patient must often be taught to walk, feed himself, to dress himself. He must be psychologically and physically equipped to withstand and combat the pitying and pampering assistance of his family and friends when he leaves the hospital.

The worker should have a great deal of time to devote to the patient when he leaves the hospital, especially during the first two weeks, since the time when he leaves the shelter of the hospital and has to face the world, is the most difficult

period of all. By this time he has come to look upon the worker as his friend, perhaps the only one who can understand his situation. With her at his side he is strong, for she is a challenge to him, to his sense of independence, and to his self-respect; without her constant vigilance, pampered by his grief-stricken family, he may become apathetic again. Left to himself he is apt to sit in a chair and sit, changing his location only at bedtime. By the time the home teacher from an organization for the blind gets to him he has formed the habit of "sitting," and it is a very difficult task to snap him into action. This is why it is so essential that the adjustment start early.

Our first case seemed to be designed to challenge and test our theory and it proved good. Mrs. T., an intelligent, gifted woman of fifty-two, who had led a very active life in a college town, suddenly discovered that she had to have both of her eyes removed. Until last May she had never had the slightest trouble with her eyes so that the shock was indeed great. She came to Medical Center from the Middle West in a last desperate hope that something might be done for her, but it was too late. Most of her time in the hospital was spent in a lethargy. When I first came to her bedside she was saying in a feeble whisper that she realized she would have to change the whole basis of her life and resign herself to inactivity. I showed her through specific examples and concrete suggestions that she did not need to change the basis of her life, but merely to adjust herself to a new set of circumstances. Interestingly enough, she had been a craft weaver, and she was astonished to find that she could continue with her old occupation.

The fact that I, too, could not see, that I had come to the hospital, was employed, was keenly aware of the world about me, made her "sit up and take notice." I taught her to use the script board, to operate the Talking Book machine, and most important of all, I was able to give her confidence in herself. Feeling that it was important that she cultivate her power of visual imagery, we discussed color combinations;

I asked her for advice about dyeing some material, and she helped me make a pattern for a bed-cover. All of this was done in a friendly fashion, during conversations, that grew naturally and spontaneously, not as if I were the teacher reading her a lecture. I felt that she ought to learn braille, but, knowing how sensitive she was, I feared that she might feel that learning braille was a confirmation of her blindness and might resent the suggestion. Instead, I read her some passages I copied into braille out of a book in which I knew she was interested. The reaction was as I had hoped—two days later she said that braille seemed pretty easy to read, and she thought she ought to learn to read it. In this work with the newly-blind person the utmost tact and ingenuity must be used.

When Mrs. T. left the hospital I visited her every day, giving her as much time as she needed. Three days after this patient left the hospital she took a ten-block walk with us to the library in order to choose her own Talking Book. Several days later, I found her washing her daughter's and her own underwear. Within a short time she was going to lectures and concerts and was visiting friends. She now reads and writes braille and typewrites—slowly but well. She said recently, "You know, I am so busy with all the things I have to do that I don't even have time to remember that I can't see."

It is three months since Mrs. T. left the hospital, and she is now making plans to return to her own home, feeling fully equipped to cope with the situation. She has by no means achieved complete adjustment nor the degree of normality desirable, but she is well on her way. We are now referring her to the Commission for the Blind in her own state.

There is the case of Miss L., a nurse, fifty-six years old, who seemed inconsolable when her bandages were removed and she realized that she was without sight. She would speak to no one, and her spirit was indeed low. It was feared, at first, that my going on the case at this point might prove disastrous, as it might serve to "rub in" her blindness. I, accord-

ingly, spoke little about blindness during my first visit. She knew I could not see and that I worked for the hospital; outside of that, I was merely a congenial, chatty visitor. During the course of the conversation, however, we discussed travelling, the difficulty I had had matching some ribbon for a hat, a play I had seen the night before, and so on and on—apparently aimless chatter. She said later that she was impressed by the fact that I could do all these things in spite of the fact that I was without sight, but, what impressed her most, was the fact that I was able to discuss with her intimately Los Angeles, her home city, that I knew Danbury, where she had had her nurse's training, quite well. When I felt myself on sure ground at the end of a two-hour conversation, I spoke to her of the Talking Book. She was delighted. I thereupon got her the machine and taught her how to operate it. She was amazed that she could manage so easily without being able to see what she was doing. Two hours later she was seen sitting up in bed in rapt attention, listening to O. Henry's *Gift of the Magi.*

When I offered her the script board the next day, she gently refused it, saying that she had no need for it. I did not press the point, but when, a few days later, she had to tell an orderly she could not sign her name, I used the occasion to point out how helpful the script board would have been. Jokingly, I said, "We must not admit our limitations, must we?" And her prompt and emphatic rejoinder was "No, indeed, we must not." This has been the keynote of her development ever since. She is not going to admit any limitation and therefore will try anything.

The day after Miss L. left the hospital, when I called at her home, she proudly announced that she had made herself a cup of tea. Several days later she went shopping with a friend at one of our large department stores, as she needed a new hat and would not have anyone else choose her hat for her. She helped her friend make stuffed roast chicken, she sewed her underwear, she tidied the apartment when her friend was away to work; she amazed herself with the many

things she could do, and proudly reported to me her successes. Three weeks after she had left the hospital she washed and ironed her friend's silk dress.

What was very thrilling in this case was that it proved that it is not necessary to reteach a newly-blind person each simple action, but that if you succeed in instilling in him a proper attitude toward his blindness and create in him a desire for independence, he will go ahead on his own. Actually, I taught Miss L. very little and it was gratifying to have her activity spring from her own desire to do things. We are now referring her to the state agency for the blind in Connecticut, as she is planning to stay with some friends in Danbury for a time.

There are cases, to be sure, where one can do little, even if one starts early. For example, one of our patients is seventy-four years old. There was little constructive work we could do for him, except to teach him to get about by himself, and to encourage his desire to do little things for himself. I did teach him to play checkers and began his instruction in reading braille. His progress, naturally, was slow, but it was touching to hear from the other patients that he often awoke at two o'clock in the morning to study. Upon his return to his home we referred him to the local association for the blind.

Often a simple bit of advice may have a great influence on a patient's life. One of our partially sighted patients, when he was returned to the hospital for treatments, complained bitterly about the humiliation he suffered every time he went visiting with his wife. He was unable to see where there was insufficient light, and his wife, at such times, would push him ahead of her, loudly announcing directions to him. He had determined never to go out again. When I proved to him how simple it was if he took the arm of the person with whom he was walking, he was amazed that he had not thought of it himself. The next time he came to clinic he reported success. "It's true, she doesn't need to give me any directions at all; I just follow her and it's so easy!" he said brightly.

The case which has been most gratifying, however, has been that of N., a girl of eighteen whose entire life has been revolutionized. She had had poor vision all of her life but had been so hampered by the maudlin sentimentality of her family, that her life was indeed a burden. Her family would let her do nothing for herself, so that after her graduation from high school her days were empty. She did not rise until the afternoon and went to bed early because there was nothing to do and she hated sitting around. What was hardest to bear was that she saw no way out, and felt that the rest of her life would be spent in this manner.

She was at the hospital for eight weeks and during that period I spent a good deal of time with her. I succeeded in convincing her that she must learn braille—a thought which had formerly horrified her. I showed her how to use cosmetics, how to dress attractively.

The change in N. is remarkable. For one thing, she seems to have grown stronger, more positive, to have more stamina. She is determined not to let circumstances crush her any longer. She has vision of fingers at two feet at present, as it will be some time before the operation will show any positive results, and yet she is more capable of taking care of herself than ever before. She has learned to cut her own food, butter her own bread, use cosmetics, and is convinced that it is possible to dress attractively, even though one cannot see. Her scepticism was hard to overcome, but now she does everything for herself. She is very nimble and gets about easily. She said the other day that she had not realized her own power and that she hardly recognizes herself.

What she said recently to a social worker at the hospital, indicates, I believe, her new attitude toward her poor vision and toward life. She said that a year ago she would have been content to stay at home the rest of her life if she could only have someone to read to her all the time; now she had the Talking Book, which would seem to answer her wish, and yet, now she knew she could never again be happy unless she were living a full and busy life.

Now it was necessary to make plans for N. when she should leave the hospital. We felt that she should go to college, to equip herself with every possible asset with which to face life. She could not start college immediately, however, as she did not know how to read and write braille. We found a solution: She was admitted to the American People's School —a school for young adults who work during the day and wish to continue their education in the evening. The students live in the school and run it on a co-operative basis. Courses are given in arts and crafts, dancing, literature, psychology, etc. This appeared to us as an ideal arrangement for N. as, living alone, among young people, she would have to become independent and self-reliant. Besides, it would leave the afternoons open for instruction in reading and writing braille, in typewriting, and whatever else she might need. We are now trying to get a scholarship for her to go to college, so that she may prepare herself for work with preschool children.

Her progress at the school has been most gratifying. She gets about without difficulty, participates in all of the activities of the other students, and generally has taken her place in the school, naturally and normally. The students are hardly aware of the fact that she is unable to see, and there is no constraint whatsoever in their relationship to her. Her charm and her personality seem to be blossoming and the students are very fond of her.

Her progress in reading braille too has been phenomenal. She went at it with a zest and within ten days she was reading and enjoying *The Old Maid* by Edith Wharton. She said the other day with great enthusiasm, "I think I am the luckiest person in the world—all the things that have been happening to me! There is so much in life ahead of me. As for braille—it's such fun being able to read all you like without having to worry about your eyes. I really don't mind being able to see less—I have so much much more."

And so the work goes on. And with every new case that arises there are new problems and a new set of circumstances

to be considered. Each new patient must be treated as an individual, with his own particular background and his own particular way of reacting to the situation. Yet, with all the individual differences, there are certain basic principles which remain bedrock. The newly-blind person, whatever his background or peculiarity may be, in order to become satisfactorily adjusted, must be made comfortable in his environment; he must be imbued with a healthy attitude toward his blindness; and he must be equipped with the tools with which to overcome his handicap. He must be made conscious that he can be, in a large measure, independent, that he must not allow himself to become a burden to others, and that, although he no longer sees, the rest of the world does, and so his appearance, gestures, habits must not be allowed to grow awkward or offensive. In short, normality must be the watchword.

We have tried to keep these principles in mind while working with our newly-blind patients at Medical Center, and the work we have done thus far has been gratifying. One fact seems to stand out above all others in this experiment and that is that one cannot start the work of adjustment too soon, that the bedside is the proper place to begin.

The WPA and the Medical Center are to be congratulated for their pioneer spirit in undertaking this work.

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Home Teaching

Calvin S. Glover

Work for the blind has evolved an appropriate form of social case work which is inadequately described as home teaching. The term is acceptable because it emphasizes the instructional aspect of the work, but it does not even faintly suggest the variety of services rendered by an alert home teacher. To the individual and to the family blindness comes as a totally unfamiliar experience. It interrupts or irrevocably restricts conventional social behavior, educational attainments, and vocational pursuits. It demands a thorough-going revision and readjustment of the essential functions of life. This has been done triumphantly by a few heroic characters that shine out through the darkness of the ages, but the achievement is not within the reach of ordinary mortals except with help from others. The resourcefulness and ingenuity of many handicapped persons, however, have indicated ways of circumventing the limitations of blindness; and the home teacher is the specialist we rely upon to convey these hints and teach these methods to our newly blind.

Home teaching began when sympathetic neighbors first tried to show a blind person how to dress himself. It became a philanthropy when the accessibility of embossed literature gave a specific incentive to the altruism of volunteer teachers. It became a systematic service when organized society engaged specialists to visit blind persons in their homes and teach them how to reconcile and adjust themselves to the baffling affliction of blindness. This was first done in America in 1882 by the Pennsylvania Home Teaching Society and Free Circulating Library for the Blind of Philadelphia. In 1900 the Massachusetts legislature appropriated funds for

the instruction of blind persons in their homes. Since then the service has extended rapidly as state commissions for the blind were established throughout the country. The majority of home teachers, therefore, are now employees of some state government, though a few private societies and certain libraries and schools for the blind retain home teachers for more or less specialized work.

Until quite recently, no technical training was available for home teachers in America. Personality, resourcefulness, and a rudimentary knowledge of handcrafts were the qualifications of the pioneers in this field. They were amazingly successful and extended the scope of their usefulness according to the needs encountered. As their responsibilities became more serious and the tasks more complicated, directing boards felt an increasing desire for a more scientific method of selecting and training candidates.

In 1922, Dr. Olin H. Burritt, Principal of the Pennsylvania Institution for the Instruction of the Blind, arranged for a two year course for home teachers to be given co-operatively by the Institution and by the Pennsylvania School for Social Work. Home teaching thus attained professional status, and certified home teachers were ready to assume all the duties of field work with the blind. Even more significant is the fact that this course has integrated work for the blind with the broader field of social service. The principles of social case work enunciated by Octavia Hill, Jane Addams, Mary Richmond and Edward Devine are now consciously blended and moulded with the inspirations of Valentin Haüy, Samuel Gridley Howe, William Moon, Lydia Hayes and Kate Foley.

Primary home teaching continues to present Moon type, braille and the Talking Book to satisfy literary hunger, but the newly-blind pupil does not live by books alone. His whole life has been dislocated: a thousand little adjustments must be made; he must be encouraged; he must be taught. The home teacher must minister to the whole personality.

Home teaching or case work among the blind is so highly specialized that many agencies have regarded the specialty

as complete in itself and almost unrelated to the general field of social service. A sound social philosophy, however, is fundamental, and to this must be added an understanding of the whole personality, an accurate knowledge of tested means of dealing with social problems, and insight to penetrate the complicated effect of blindness on every phase of life. Case work among the blind should presuppose general social training, and effective personality should support and reinforce all other qualifications for home teaching.

When we say that social case work aims to adjust an individual to his entire environment, we merely state that the fullness of life depends upon satisfactory adjustment of every phase of personality to the conditions and circumstances which surround life. We may agree with Dr. Cabot that "work, love, play, and worship" are the most irresistible cravings of the human soul, but we must strain our logic considerably to bring every desire of life under these four categories. The social worker cannot afford to ignore daily commonplace irritations which demand understanding, and patience, and kindness.

A very superficial investigation will usually establish the fact of blindness and certify the individual as a client of the agency. A more technical investigation is necessary to determine whether or not the blindness will yield to treatment. To omit this would be sheer stupidity, for the complications of blindness are too often overwhelming, and every measurable degree of vision gained modifies the problems. The obvious fact of blindness, however, is not always the chief cause of maladjustment. A thorough social investigation should assemble the facts concerning the personal habits and propensities of the individual, his participation in the duties and amusements of the family, and his contacts with the community outside his home. This investigation cannot be made with inquisitorial directness, but must be slowly unravelled by the cordial interest and sincerity of the worker.

With the salient facts clearly in mind, the special problem of each individual must be analyzed with scrupulous care.

Familiarity with general social problems will throw the first light on this subject, but it must be scrutinized with a deep understanding of blindness as a possible distorting influence upon all characteristics. Infinite patience and sympathy at this task will be well rewarded.

The most obvious need of every blind person is work. His most serious problems, both economic and social, are usually attributable to the lack of it. Those who are energetic and resourceful find for themselves some occupation which, occasionally, is the expression of exceptional talent or genius; but a far larger proportion have to accept work which is inadequate in the satisfaction it gives and often unprofitable.

Frustration of the craving for love, affection, oneness with others is one of the most subtle and cruel corollaries of blindness. The taboos that obscure both the discussion and the treatment of this situation, cause many workers to ignore it or to become heartlessly dogmatic in attitude. It is doubtful whether or not anyone who has not personally experienced the heartaches of these emotional deprivations can understand them.

The spirit of play is too fundamental in human nature to be stifled without dire consequences. Lack of sight makes impossible the most popular forms of recreation, and imposes a degree of social isolation and physical inertia which menace mental and bodily health. To judge the significance of this aspect of the problem one must study the personality and discriminate between habits that are common to all people and those that have been superimposed by blindness.

The importance of worship as an emotional outlet varies widely with individuals. The general assumption is that it has a more dominant role in the lives of blind persons than it can claim generally. A wholesome cultivation of this emotional outlet is eminently desirable, but a worker with blind clients must be alert to discourage fanatical or morbid excesses.

Intelligent planning and successful treatment of a newly-blind person demand extensive acquaintance with the social

resources of the community. To begin with, the home teacher must of course know many tricks and personal devices for overcoming the handicap of blindness, must understand the possibilities of braille, of adapted games, special watches, etc., must be able to teach the client "how to be blind" in many little personal tasks, and must enjoy the confidence of other social agencies whose specialized services can benefit the blind.

The home teacher's introduction to a prospective pupil or client is likely to be the crucial moment of their relationship. The first call must be conducted with impeccable honesty, intuitive tact and profound appreciation of the psychological currents that are likely to be active. The handicapped person rarely invites the teacher to call; in most cases a relative, friend or interested social agency has requested the assistance, and a welcoming attitude on the part of the host is not assured. The blind person may be despondent and indifferent to offers of help; he may be resentful and antagonistic toward "meddlers"; he may be a confirmed pauper with an open hand for material relief; he may be contented with his modest place in the home; or he may be eager and ambitious for a more abundant life. There is an intelligent approach to each of these attitudes, and the home teacher must be so sensitive to the atmosphere that greets him or her at the threshold that no fatal mistake is made. It is often possible to appraise this situation from the report of the agency or friend who referred the case, but the affair may be so delicate that no mutual acquaintance can be mentioned. The home teacher is not an inquisitor, and the call is not warranted by any right to intrude. Having learned from a certain source, specific or vague, that an individual in the home is having visual difficulty, the visitor merely offers assistance because of experience with such problems, and awaits acceptance and an invitation to share the private life of the blind person.

The status of the blind person in the family must be quickly discovered. He may be coddled, petted and exhibited, he may

be hidden as an embarrassment to the family, he may be a millstone around the neck of the bread-winner, he may be the cheerful, helpful center of the family circle. The home teacher must perceive this relationship and form a suitable alliance with all members of the group with a view to improving the situation. It is often necessary to do the most intensive work with other members of the family.

When the home teacher has gained the confidence of the pupil and the co-operation of the family, a systematic plan of instruction or rehabilitation may be started. Possible achievements will be the theme of conversations from the beginning, and the teacher will carefully note every symptom of awakening interest. With ingenuous characters the first interview may disclose an appreciation of literature, some talent for music, a peculiar industrial skill, a predilection for business administration, or a devotion to one of the learned professions. When any such propensity has been discerned, the teacher must frankly discuss whether the goal is attainable, and outline the practical procedure involved in approaching it. The elementary training in adaptation to blindness must start at once. In most cases the mastery of braille or Moon type is a prerequisite, and the use of special aids and appliances must be explained. If technical and professional training is desired, the home teacher should attempt to arrange for that, and stand by as an adviser until the student has acquired enough skill and resourcefulness to stand on his own feet.

No organization for the blind has solved the industrial dilemma, for the traditional workshop trades satisfy only a small percentage of those who should be employed. The segregation of the blind, even for work, is regrettable, and the efficient case worker will maintain extensive contacts with business groups on their behalf.

No process in the social adjustment of a blind person is more important than the education of his family and his neighbors. Any measure which presents to the public a true

understanding of the blind may be regarded as effective treatment.

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The Employment of Blind People in Competition with the Seeing

Joseph F. Clunk

As an investigation of the records of agencies for the adult blind in all parts of the country will show, during the past thirty years a large number of blind individuals have been placed in competition with sighted people—and in a great variety of occupations. A partial list of the occupations reported in a survey made by the American Foundation for the Blind is included in this paper. A little questioning of the present heads of such agencies, however, will also show that very few employers still retain blind persons in their organizations, and many executives of agencies for the blind are convinced that when an employer has had a blind worker, and that worker has been released, the employer will not consider employing another. If this is true, it is obvious that the placing of one blind person serves only that individual for a short space of time, and upon termination, the community has one less open-minded employer who can be approached.

There must be some reason for the result. It is easy enough to claim that blind people are incapable, or that industry and business are too highly competitive to absorb the ability of blind persons, or the business world is unreasonable and unsympathetic. The acceptance of this philosophy would justify the development of sheltered industries to the greatest possible extent, and the complete disregard of other employment activities. The reasons for this attitude seem to be as follows:

1. That the agency made a poor selection of the individual for the job.
2. That some time after successful placement, changing

production processes involved the blind worker and caused the management considerable worry in the readjustment of the blind person.

3. That changing physical conditions of the individual rendered that person less capable, caused the management unnecessary expense, and ruined its good will.

The average person does not welcome intimate daily contact with handicapped people, and this is especially true in his attitude toward blind persons. It is an almost impossible task for any blind person to secure constructive criticism and honest opinions about performance, and employers will avoid the responsibility for delivering necessary criticism by closing their doors to the blind employee. Again the blind worker, restricted in his ability to learn by observation, and denied honest opinion on the part of his fellow workers, tends to develop habits of thought and action that are undesirable. The final result is removal for some fallacious reason, and the resolution in the mind of the employer that he will never again permit such an embarrassing situation.

The solution of the problem has been found in developing an approach which will reconcile the employer's understanding of blind persons with the demands of his own business.

The principles which must be observed are:

1. Seek only jobs which require manual dexterity, reasonable intelligence, and at which blindness is not a bar to normal production.

2. For a given job select the blind person who has the same general characteristics as the sighted person performing the same task.

3. Exercise care in matching the personality and temperament of the blind person with that of the foreman and the sighted workers in the department.

4. Check the results of the placement closely during the training period usually allowed sighted workers. If the blind person does not keep pace with the inexperienced sighted

worker at the same task, and does not achieve the required speed in the length of time allowed for the sighted, the blind person should be removed immediately and replacd by another. If the analysis of the job is correct, and blindness is not a bar to normal production, the blind person fails for the same reason that would produce failure in a seeing worker as well, and that is lack of sufficient manual ability or intelligence to perform the task.

5. The employer must realize that the agency will not permit a mixture of charity and business, and the agency must carry the full responsibility of protecting the employer against such admixture.

6. Very few sighted persons will accept the responsibility of discharging a blind worker or of giving him honest facts about his performance. Rather than face this problem, the prospective employer will find many excuses for not cooperating. If the agency wins his confidence by meeting this situation, the doors to many jobs will be opened.

7. Avoid processes involving glue, adhesive cement, and similar materials which stick to the fingers and interfere with the combined use of the hands for both work and observation. Also, avoid placing totally blind persons on jobs involving the selection of materials by color, or processes requiring considerable movement around the shop to secure or dispose of material, or the handling of items that are too large or too small.

8. If any of the factors mentioned above are present, persons with sufficient sight (up to 10 or 15 per cent) should be selected, so as to avoid any possible extra expense and inconvenience to the employer.

9. Usually, work on small items, such as jewelry, and large items, such as heavy castings, automobile fenders, etc., is impractical. There is a middle ground in the handling of materials and equipment where observation and manipulation are simultaneous, and there is ample room for successful placement.

Method Used in Securing Placements

There have been many experiments made in the type of staff to conduct a program of this kind. A very few sighted workers have achieved some success in placing blind persons on simple assembly processes. One organization tried a combination of a blind person to demonstrate jobs, with a sighted person to sell the placement idea. The result was unsatisfactory, and to date, the best results have been secured by using a capable blind man with mechanical ability as a combination salesman and demonstrator with a sighted staff of supervisors.

The blind placement agent answers many questions for the employer. For example, "How will this blind person get to work?"; "How will he do this job?"; "What can the blind person do in my plant?". The blind placement agent, traveling alone, answers these questions in order by his own performance. He can illustrate to the employer that the perceptive faculties of any person are mental by simply picking up an unfamiliar object on the desk, he can show that pictures of the work material can be conveyed to the mind through the hands as well as through the eye, and he can go into the shop and work at each process long enough to prove his point. Furthermore, the demonstration will bring to light any objectionable features which might mean failure for the prospective employee.

Sighted Supervisors

Assuming that a blind person is placed, the sighted supervisor calls upon the blind worker at the end of his first day and at other intervals, observes the manner in which he does the job, gives him information as to how sighted workers are performing, assists him to eliminate waste motion, times his performance, and checks it with the results of the sighted. In this way the agency for the blind does not need to depend upon kindly false reports from the foreman, and the blind

employee receives constructive unprejudiced criticism. If, as indicated previously, the blind worker does not meet the normal requirements, the blind placement agent calls upon the management again, removes the unsatisfactory protegé, and brings in a successor. Naturally, the person who has failed will be considered for placement elsewhere on some other task which experience has demonstrated may be better suited to his ability. After a successful placement is made, either the sighted supervisor or the blind placement agent should visit the plant frequently enough to keep informed of possible changes, either in manufacturing processes involving the blind worker or in his personal life, which are likely to influence his daily performance. Furthermore, new general managers, superintendents, or foremen who find themselves inheriting a blind employee, should have the entire proposition explained to them so that their complete co-operation may be secured.

Accidents

Blind workers are the safest employees in a plant due to the fact that blind persons exercise more care, and do not take chances. Occasionally, a slight hand injury may occur, but even these are less frequent and serious than is usual with sighted labor. The reverse reaction of a blind person is more instantaneous and automatic than that of the sighted. For example, when a sighted person hits an obstacle in the dark, the impact seems to produce a great shock, but it is not the impact that really causes the injury but the momentum or inertia of the moving body and its desire to go on through the obstacle. The movements of the blind person are more tentative and exploratory and thus he recoils more rapidly from the obstacle. This same principle applied to factory work eliminates serious difficulty. A blind placement agent was demonstrating a large high-speed grinder, and the superintendent thought he saw the blind man touch the grinder stone many times during the half hour demonstration, but could not

understand why it did not hurt his hands. After the blind man had finished and had gone on to another task, the superintendent touched the stone with his knuckles and had to go to the first aid for attention. He inquired of the agent as to the kind of hands he must have to avoid such injury, and then he learned that the blind man had been using the current of air around the revolving stone as a guard to indicate proximity. The superintendent had been fooled into thinking there was actual contact. The same ability to recoil saves blind persons from bruised faces and other kinds of shock when traveling about alone, and contact is made with posts and other similar objects.

When a blind worker goes to his job, he does not attempt to enter the plant or go to his department alone. Instead, a sighted co-worker is always used as a guide for the journey. This assistance is automatic on the part of fellow workers who like to volunteer their services. The same principle applies when leaving the plant. The result is greater safety for both. Any sighted person crossing the street with a blind person automatically exercises a higher degree of care in looking after the blind friend, than he would do for his own safety. In addition, the blind person is also aware of many conditions and hears many things that the sighted guide does not see. If the blind worker must leave his place during the day to go to the rest-room, it is easy for the assistant foreman or some supply worker to act as guide. Usually, the blind worker does not leave his place during working hours, and all personal services are taken care of during the noon period.

Workmen's Compensation

While practically all states have Workmen's Compensation insurance laws, none of them, as far as I know, discriminates against blind persons. Obviously, if a blind worker has an eye injury, he cannot be paid for the loss of sight, but might receive a compensation during the lost time period just as

though recovering from any other surface injury. If any other member is lost or disabled, he is paid only for the loss sustained and not for the accumulated effect. However, fears along this line are unnecessary, for as explained before, accidents rarely occur. Insurance claim departments have many figures to show that the percentage of second injuries or of injuries to handicapped persons is extremely small. In so far as the immediate rates are concerned, there is again no effect, for rates are based upon claims paid, and since blind workers do not have claims, the rate is not affected. The state of Ohio provides that a blind worker may waive his rights to compensation if the sustained injury is due to his blindness. However, if the accident is one that would have occurred to a sighted person, he can collect insurance. So far as is known, in a period of twenty years, there has never been a test case of this law, although it does serve to assure some employers of labor.

A very interesting amendment to the Compensation Act was passed in 1931 in the Province of Ontario, Canada. This amendment provides that a blind person placed on a job approved by the agency for the blind, will receive compensation in case of injury, but none of the claim in excess of fifty dollars will be charged to the employer. Any amounts in excess are paid from the general welfare funds of the Province and thus do not affect the premiums of the employer. More than ten years of intensive placement activity in many different kinds of industry have not produced a single claim, and the general effect of the law is thus even more encouraging to industry.

Concession Stands

During recent years the placement of blind persons in vending stands has attracted a great deal of attention and public approval. There is, however, as much danger that the agency will try to fit all persons into stands as there is of its placing all workers in sheltered industries. Refreshment stands in public

buildings, hospitals, schools, factories, and on the street can form a very fine foundation for a general employment program. Such stands are observed by thousands of persons every day. If they are properly operated, the public receives a favorable impression. Consequently, the public mind does not find it difficult to consider the practicability of employing blind persons in other fields.

When dealing with stand concessions, many agencies have made the mistake of not realizing the conflict of philosophy between agency control and individualism. The appalling number of stand opportunities lost in all parts of the nation should prove beyond a doubt that individual control and ownership is not practical. The results secured by agencies who look upon the stand as their responsibility, and who control it for the use of successive blind persons, prove that satisfactory results can be achieved in this manner. Here again, the agency must maintain a standard of service which requires no apology and which produces a growing and increasingly favorable public opinion.

Sighted Help

It is seldom practical to have more than one blind person in a stand, for the duties which can be performed in a satisfactory manner without sight will seldom require the energy of more than one blind person. If more help is needed, it should be given by a sighted assistant, employed by the blind operator, but under the advice and guidance of the placement agency. If the operator does not require the full-time services of an assistant, sufficient sighted help should be used to keep the stand in good condition, and to avoid any need for apology to the public because of the blindness of the operator. If a stand is selling un-packaged foods, a sighted staff should always be in attendance. Never permit blind persons to prepare and serve foods for public consumption. No difficulty may ever arise, yet if it should, there is no defense against it, and the entire service is damaged beyond repair.

Supervision

An agency should not establish or encourage the development of stands for blind persons unless that agency is able to give capable sighted supervision to the business. One supervisor should not have more than twenty stands as a case load, and if these are scattered over a large area, the number should be reduced. Each operator should be called upon once a week, and the supervisor should be able to spend from one week to one month in a stand in order to correct difficulties which may occur. The efficiency of the operator, the results to the group and to the community, the permanency of the program depend entirely on the quality of supervision given. A blind administrator may easily direct the work of the sighted supervisors, and is the best disciplinarian for the operators, but the actual detail work should not be attempted by a blind person. In the final analysis, the stand must meet the standards of the sighted public, and the supervisors must bring to the operator a true picture of the way the public sees him and his business.

Other Occupations

It is impossible to enumerate the occupations which are purely individualistic in character and which are dependent upon the initiative, imagination, and peculiar talents of a particular person. There are a number of blind persons who are members of the bar and practice law. Some have achieved remarkable success and others have been failures. Part of the difficulty seems to arise with the individual who believes that his college degree is sufficient to take the place of hard work, and who believes that the world should automatically come to him for his talent. If the blind lawyer, in starting his practice, were content to take small cases, to secure good results in them, and build a community reputation for success, he would find that business will come his way within a reasonable time. The blind lawyer is a very conspicuous member in his com-

munity, and his successes are amplified in the public mind as much as are his failures. Osteopathy, massage, and chiropractic have many successful practitioners. Every field of professional life has its representatives among the blind. There are newspaper editors and reporters, writers of books of fact and fiction, advertising managers, manufacturers in various fields, business administrators, public officials, teachers in grade and high schools as well as in colleges and universities, musicians of real ability, and farmers who do much better than earn a mere existence. Many examples can be given of successes in these fields, but in the final analysis, the answer to the question "What can my blind friend do?" is the second question "What are his talents and native resources?" For the present, it is necessary that agencies supply the required sales ability in marketing the talents and abilities of blind persons. A few will always carve their own careers, but the majority must have leadership. Placement might be defined as the selling of the ability of blind persons on a normal basis and the continuous development of a purchasing attitude on the part of the public.

SOME OCCUPATIONS IN WHICH BLIND PEOPLE HAVE SUCCESSFULLY ENGAGED

Agriculture

Farmer
Dairy farmer
Truck farmer
Poultry farmer
Apiarist

Transportation and Communication

Laborer, streets and roads
Manager, trucking business
Telephone operator

Trade

Oil land promoter
Merchandise market
Commercial traveler
Coffee taster
Insurance agent
Manager, employment agency
Executive (business)
Real estate dealer

Public Service

Tax collector
Secretary, school board
Member, public service commission
Representative in legislature
Collector of customs
U. S. Senator
Justice of the Peace

Professions

Entertainer (musical)
Author
Journalist
Editor
Clergyman
College professor
Lawyer
Judge
Composer (music)
Organist
Pianist
Singer
Music teacher
Musical director
Bandmaster
Commercial player (theater)
Osteopath
Teacher, school for the seeing
Teacher, school for the blind
Librarians (dept. for the blind)
Chiropractor
Dramatic reader
Masseur
Superintendent of institution
Evangelist
Executive (agency for blind)
Home teacher
Social worker
Physician's assistant

Retail Dealers

Book dealer
Shoe merchant
Standkeeper, news and confectionery
Clothing-store keeper
Coal, wood, and ice dealer
Dry goods dealer
Grocer
Furniture dealer
Fruit dealer
Hardware dealer
Dealer in musical instruments
Produce dealer
Stationery dealer
Salesman
Manager, candy business, manufacture and retail
Manager, retail piano business
Office supply business
Mail order business

Clerical Occupations

Publicity agent
Advertising manager
General clerical worker
Dictaphone operator
Typist
Stenographer

Domestic and Personal Service

Manager, barber shop
Manager, poolroom
Rooming-house keeper
Housekeeper
Hotel-keeper
Janitor
Laundry worker
Restaurant keeper
Dishwasher
Domestic

Factory Occupations

Assembly work (automobiles, nuts, bolts and locks, vacuum cleaners, telephones, electric specialties)
Inspecting (auto axles, auto valves, shoes, camera parts)
Stuffing upholstery
Buffing (metal)
Drill-press operating
Punch-press operating
Packing (needles, cans, candy, cards, novelties)
Core making (foundry)
Riveting, safety razors
Racking, window pulleys
Stringing jewelry
Washing machine parts
Armature winding
Screw setting (furniture)
Crating veneers
Foreman, dye-room
Inverting bags
Shaping gloves

Sorting shoe findings
Folding boxes
Box folder
Stoning dates
Building fields for sweepers
Building wood shipping cases
Repairing bottle crates
Operating milling machines
Grinding
Broaching and reaming.

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The Blind under the Social Security Act

Evelyn C. McKay

Special legislation providing relief for the needy blind in the form of direct financial assistance from public funds has about seventy years of history in the United States. The oldest provision of this type is found in a resolution passed in 1866 by the Board of Aldermen and Board of Councilmen of New York City, establishing a definite procedure for dealing with applications from blind persons for "donations" from city funds. From this early resolution developed the provision in the New York City Charter under which special relief to the blind was administered until 1937.

The first effort at state legislation for relief for the blind was in Ohio, where in 1898 a law was enacted for this purpose, the administration being placed in the hands of the township trustees. This law was later declared unconstitutional, and a new act which replaced it in 1904 was likewise ruled out by the State Supreme Court. Finally in 1908 a law was enacted by the legislature which triumphantly passed the test of constitutionality and established the principle of relief for the blind from public funds.

In the meantime the legislature of Illinois had, in 1903, enacted a so-called "blind pension" law, and the precedent of blind relief having thus become firmly established, other states followed, one by one, until, by January, 1935, when the Federal Social Security Act was introduced in Congress, twenty-six states and the City of New York had made special financial provision from public monies for their needy blind people.

The theory on which blind relief legislation is based is that blindness itself is a sufficiently well-defined cause of poverty

to require special consideration at the hands of the state. The blind people themselves have been especially active in initiating and promoting such legislation since they feel that a special allowance, made in consideration of their handicap, is free from the stigma commonly attached to "poor relief," and moreover that, by the setting up of special administrative provisions, they are spared the humiliation of investigation by the general relief authorities who, they feel, do not understand the special needs and problems of blind people.

Some persons hold the opinion that such special allowances are a sort of compensation for blindness and that all blind persons should be entitled to them regardless of need. In this connection the allowance is often termed a "pension." The majority of workers for the blind, however, and many thoughtful blind people, oppose this point of view on the ground that the "pension" discourages industry and tends to pauperize the blind individual and that the taxpayer cannot be expected, and should not be asked, to contribute to the income of those who can maintain themselves without such assistance. Moreover, to provide a "pension" of adequate amount for all blind persons regardless of need would require such vast expenditures from public funds that the taxpayers would in time rebel and might repudiate the whole idea of special public assistance to the blind. Those who take this position advocate the administration of such special allowances on the basis of need.

Such allowances were formerly known as "blind relief" and, until the passage of the Social Security Act, the terms "aid for the blind" and "assistance to the blind" were not in common usage in this connection, possibly because of the danger of confusion with another type of state assistance to the blind—namely, the services rendered by state departments or "commissions" for the blind.

Services to the Blind

From the beginning of organized work for the blind in the United States early in the nineteenth century it has been the

aim of the friends of the blind to render them self-supporting so far as possible. The first step was the education of the young blind; then the establishment of special workshops where capable blind people were given employment; then the teaching of embossed print and handicrafts to adult blind people in their homes. At first these activities were in the hands of voluntary agencies, financed by philanthropic private citizens, but gradually their usefulness was accorded recognition by the state. In 1906 the first "Commission for the Blind" was established by act of the Massachusetts legislature—a state agency, supported from public funds, for the purpose of locating blind persons, providing vocational training and employment for them according to their capacities, teaching them the use of embossed print, and helping the newly blinded to adjust themselves to their handicap.

This was the beginning of a renaissance of interest in the blind, and, during the next twenty-five years* additional state departments for the blind came into being with powers as broad as those defined above, their purpose being to promote the welfare of the blind as independent, active, participating members of society. The depression which began in 1929 and the resultant pressure on state legislatures to reduce expenditures, however, temporarily halted the development of this constructive program. Budgets were severely cut, particularly in some states where the work was in its infancy, and no new commissions for the blind were established in the states which had not previously made such provisions. Yet the needs of the blind people for eye care, employment, and social adjustment were intensified by the depression.

The Development of Provisions for the Blind in the Social Security Act

In January, 1935, when the Social Security Act was introduced in Congress, workers for the blind saw, in the section providing federal funds for assistance to states in their pro-

* Two other states (Florida and Nebraska) had passed legislation to establish such state departments for the blind but had made no appropriation.

grams for crippled children, what appeared to be a solution for this problem of inadequate support for state programs for the social and vocational adjustment of the blind. A proposed amendment to the Act was drafted, which provided for federal funds to the extent of $1,500,000 to be used for assistance to the states for their expenditures for diagnosis and treatment of eye conditions, vocational training, employment, home teaching, and other social services, and for special appliances and equipment used in the education, employment, and recreation of the blind. This suggestion was laid before the Senate Finance Committee, and workers for the blind united to secure support for it. The Senate Finance Committee, however, incorporated in the Act when they reported it back to the Senate, not this proposed amendment but another (the present Title X) providing $3,000,000 for federal aid to the states in their programs of "aid to the blind," this term being defined to mean "money payments to needy blind persons." Whereas the original suggestion had followed closely the wording of the provision for crippled children (Title V, Part 2), the actual amendment reported was drafted along lines similar to those of Title I providing old-age assistance, a circumstance which exemplifies the wide difference in the concepts which lie back of the two plans.

Senator Robert F. Wagner, sponsor of the Social Security Act, offered another amendment from the floor of the Senate, embodying the ideas of the original proposal and providing that half of the sum of $3,000,000 be used for reimbursement of state expenditures for "locating blind persons, providing diagnoses of their eye conditions, and for training and employment of the adult blind." This amendment passed the Senate but was stricken out by the Joint Conference Committee of House and Senate to which the bill was referred. In the final form of the Act the use of federal funds was limited to reimbursements for state programs of blind relief.

This brief sketch of the origin and history of Title X has been presented because of the light it throws on the problems involved in the administration of aid to the blind under the

Act. Supporters of the original amendment believe that the primary consideration in the welfare of the blind is their restoration to social and economic independence, either by improvement or restoration of vision through proper medical care, or, if blindness is irremediable, through vocational training, employment, instruction of the adult blind in their homes, and adjustment of the newly blinded to their handicap. Financial relief is but one phase of such a program, to be resorted to only as a temporary measure, or when all else fails.

It was feared that if federal funds were available only for relief purposes, this phase of the program would entirely overshadow the more constructive activities, contrary to the best interests of both the blind people and the general public.

The Provisions of Title X

Title X authorized the appropriation of the sum of $3,000,000 of federal funds for the fiscal year ending June 30, 1936, and, in each fiscal year thereafter, so much as might be necessary for assistance to the states through reimbursement for one half of the state's expenditures for aid to the blind (but the federal grant shall not exceed $15 on behalf of any one blind person). In order to be eligible for federal funds, a state must have in effect a state program of relief to the blind which is found by the Federal Social Security Board to meet the following requirements specified in Section 1002 of the Federal Act.

"(a) A State plan for aid to the blind must

1. Provide that it shall be in effect in all political subdivisions of the State, and, if administered by them, be mandatory upon them;

2. Provide for financial participation by the State;

3. Either provide for the establishment or designation of a single State agency to administer the plan, or provide for the establishment or designation of a single State agency to supervise the administration of the plan;

4. Provide for granting to any individual, whose claim for

aid is denied, an opportunity for a fair hearing before such State agency;

5. Provide such methods of administration (other than those relating to selection, tenure of office, and compensation of personnel) as are found by the Board to be necessary for the efficient operation of the plan;

6. Provide that the State agency will make such reports, in such form and containing such information as the Board may from time to time find necessary to assure the correctness and verification of such reports;

7. Provide that no aid will be furnished any individual under the plan with respect to any period with respect to which he is receiving old-age assistance under the State plan approved under section 2 of this Act.

"(b) The Board shall approve any plan which fulfills the conditions specified in subsection (a), except that it shall not approve any plan which imposes, as a condition of eligibility for aid to the blind under the plan—

1. Any residence requirement which excludes any resident of the State who has resided therein five years during the nine years immediately preceding the application for aid and has resided therein continuously for one year immediately preceding the application; or

2. Any citizenship requirement which excludes any citizen of the United States."

It is of interest to note that on May 17, 1935, when the Social Security Act, with Title X included, was reported back to the Senate, twenty-six states* had programs of relief to the needy blind in effect but not one of these programs met the requirements of the Federal Act. Some were rendered ineligible by the stringency of their residence requirements, some by the fact that the blind relief was administered by the counties without supervision of a state agency, some by the fact that the relief law was not state-wide and mandatory on the counties, some because there was no financial participation

* Florida, Indiana, Oklahoma, and the District of Columbia enacted blind relief legislation in 1935, which did not take effect until later.

by the state. Two states, Massachusetts and Connecticut, in which relief for the blind was administered under a general clause in the law which established the state department for the blind, found that they would be able to qualify by changes in the rules and regulations of the state department; but the remaining twenty-four state laws required legislative action to bring them into conformity with the provisions of the Federal Act.

New Hampshire was the first state to take action, and, in June, 1935, (before the Social Security Act had been fully passed by Congress), the necessary amendments to its laws were enacted. Other states, one by one, hastened to make themselves eligible for the anticipated federal aid, either by amending existing laws or by passing new legislation.

By January 1, 1938, 36 states, Hawaii, and the District of Columbia, had in effect plans which met the requirements of the Federal Act, and six others had provided for public assistance to the blind by legislation.

Eligibility of Blind Persons to Receive Aid

It is to be noted that the Federal Act imposes no restrictions upon the states as to the qualifications for eligibility for the relief grants, except in the case of residence. Each state is left free to establish its own definition of blindness and its own definition of need.

There were wide variations among the several state laws on both these points. The definition of blindness, for instance, ranged from the restricted "not more than light perception," in the Missouri law, to the somewhat general "inability, by reason of loss of eyesight, to provide oneself with the necessities of life," which with slight variations is found in the laws of several states.

The definition of blindness recommended by the Social Security Board, however,—"visual acuity of 20/200 or less in the better eye with proper correction, or a limitation in the fields of vision such that the widest diameter of visual field

subtends an angular distance no greater than 20 degrees"—is coming to be generally adopted by the various states, either specified in the law or established by administrative regulation.

The differences in definition of need are even more striking. While more than half the states define need in general terms, such as "inability to provide oneself with the necessities of life," there are a few notable exceptions. Some states define a needy individual as one whose yearly income is less than a specified amount. The Pennsylvania law of 1935, for instance, provides that any blind person whose annual income is less than $840 shall receive an allowance of $360 a year, and any blind person whose income exceeds $840 shall receive a grant sufficient to bring his total annual income up to $1,200 per year. While this is the most liberal income allowance provided for in any of the states, a number of other states have adopted the same principle of defining need in terms of income.

In this connection should be noted the differences in the amounts of relief grants to be paid. While most states provide that the amount of the allowance shall be adjusted to the needs of the individual, with specified maximums ranging from $360 to $600 per year, two states (Missouri and Illinois) specify in their laws the amount to be granted ($300 and $365 per year) to all eligible applicants alike, without regard to variations in need.

These variations in definition of blindness, definition of need, and principle of determining the amount of the grant are reflected in the expenditures of the various states for aid to the needy blind. Aid to the blind in Pennsylvania, for instance, in 1937 totalled $3,748,965, or approximately 36 cents per capita of general population. In the neighboring state of New Jersey, on the other hand, the total for 1937 was $130,031, or approximately 3 cents per capita of total population. Although the Social Security Board has power to supervise the administration of state plans, it has no power to require changes in the state requirements for eligibility, and it may prove that eventually the lion's share of the federal funds will go to those states which expend the greatest amount for financial aid to the blind, not to those which, through administra-

tion on a case work basis, are striving to provide adequate relief at a reasonable cost.

Recommended Blind Relief Legislation

After observation of the experience of the various states in administering their blind relief laws during the thirty years which followed the enactment of the first such legislation, many workers for the blind believe that blind relief is most satisfactory when it is administered by a state agency as part of the total program for the welfare of the blind. Such a plan makes it possible to utilize the relief grants as supplementary aid during a period of vocational adjustment, to restore to the sighted world and to economic independence many who are unnecessarily blind through ignorance or neglect, and to prevent the abuse of public funds by those who could, if they would, support themselves by their own efforts.

The trend of opinion among leaders in public welfare administration has been to administer aid to the blind through the same channels as the other forms of public assistance for the sake of administrative efficiency and economy.

Whichever plan is adopted, however, the essential factor is the integration of the relief program with the program of services for the blind. Lack of this integration tends to pauperize the blind, to discourage industry, and to add to the relief rolls many who need not be receiving public assistance.

Other provisions which experience has demonstrated to be desirable in a program for aid to the blind are:

Administration or supervision by a state agency to insure uniformity of policy;

Partial financial responsibility by the counties to ensure local interest and a feeling of responsibility for the blind in the community;

Administration on a sliding scale on the basis of individual need, to ensure adequate provision for those who have no other resources and at the same time prevent an undue burden on the taxpayers;

A reasonable definition of blindness and provision for the determination of blindness by ophthalmological examination;

The use of relief funds for restoration of vision and for maintenance during vocational training in order to reduce dependency wherever possible.

All of these recommendations are consistent with the requirements of the Social Security Act, except for the fact that federal funds cannot be used to reimburse grants made for medical service for restoration of sight.

Constructive Administration of Aid to the Blind

In the early months of the administration of the Social Security Act, there was unfortunately a tendency among some legislators and public welfare officials to regard the dependency of the blind as comparable to the dependency of the aged or of widows and orphans. The fact that the Federal Act makes provision for all three types of aid in almost identical terms contributed to this point of view, and moreover, in some states the administration of the three categories was placed in the hands of workers who had had no opportunity to become familiar with the special problems of blind people and supposed their needs to be the same as those of persons in the other categorical groups.

The fallacy of this point of view, however, is apparent. For the aged the hope of regaining economic independence is very slight; what they desire is an allowance which will provide the maximum of security for their remaining years. For widows and orphans the acute need is usually temporary, and aid will be required only until the children attain adulthood and become self-supporting.

The blind, however, are a heterogeneous group in which are included representatives of all age groups, and all levels of ability. For a large proportion of them the regaining of economic independence is possible, provided they have the necessary training and assistance in adjusting themselves to their handicap. They are not necessarily permanent dependents like

the aged except when age or ill health combines with blindness to make them so; nor are they usually temporary dependents, as are orphans who in a few years achieve maturity and take their normal places in the economic world. The truth is that whether the dependency of the blind is permanent or temporary depends upon the extent to which special services for medical care, education, and vocational adjustment are available to them in the community. Any plan for the administration of blind relief which failed to take into consideration these factors could only increase dependency and stultify initiative.

The Present Effects of the Social Security Act

During the first months after the passage of the Social Security Act, there was great pressure on the various state legislatures to enact laws to make their respective states eligible for federal funds, and under these conditions it was only natural that some hasty and ill-considered legislation was passed which merely met the minimum requirements of the Federal Act and failed to give cognizance to the more constructive phases of the program for the blind. Moreover, an immense number of new workers had to be provided quickly for the administration of aid in the three categories, and, under pressure of heavy case loads and new procedures, these workers had little opportunity to acquaint themselves with the special needs of their blind clients, who, after all, were comparatively few in number.

Within a few months, however, when the initial pressure had lightened, the workers in aid to the blind began to interest themselves in the other problems of the blind people under their care. To this task they brought a growing facility in case work techniques, a sincere interest in blind people as *people*, and an unusual degree of resourcefulness in finding constructive solutions to their problems.

The Social Security Board, stressing prevention of blindness and adequate ophthalmological care for the restoration of sight, contributed its share in this movement, with the result

that careful eye examinations by competent ophthalmologists and suitable medical and surgical care for eye conditions are now available to thousands of blind persons who never enjoyed such facilities before.

With the demonstrated eagerness of county workers to learn more about the problems of blindness, with the growing concept of the county worker's job as social service rather than the mere investigation of eligibility, and with increasing integration of the financial aid to the blind with state programs of services to the blind, it now appears that within a few years the blind people of the country will be enjoying vastly increased benefits, not only through money payments but through constructive community interest in their welfare.

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VII. VOLUNTEER WORK WITH THE BLIND

Volunteer Service in Work for the Blind

MacEnnis Moore

VOLUNTEERS in social work are men and women who offer their services, without pay, to public and private agencies carrying on service and relief programs. Closely allied to the volunteer work done in co-operation with public and private social work organizations, are efforts which may be independently undertaken by such groups as service clubs, religious societies, fraternal orders, etc.

Work for the blind, in its many aspects, has always had a ready appeal to volunteers—in groups and as individuals. The volunteer service may be expressed in terms of interest in blind individuals with their own problems, or activities may be on behalf of some large group of blind people. An example of the former is the work which a club may do to help build up patronage for a stand operated by a blind person. An example of the latter is active promotion of special legislation affecting the blind.

There are always at least three sides to the problem of volunteer service: the needs of those blind persons who are to be helped; the qualifications of the volunteers themselves; and the agency in a position to work with volunteers, so that their service will be constructive. A word will be said on each of these aspects.

The blind, like all other people, are individuals. Their blindness does not make them alike. Degrees of independence and dependence vary greatly in the blind as in the seeing. Just because a person is blind, it does not necessarily follow that he needs or wants assistance from an agency or an individual.

Furthermore, most blind people are a part of a family. Therefore, the problem occasioned by their blindness does not exist in a vacuum. Any service by an agency or by volunteers must be related to the total situation in a given family. Volunteers should always realize that they are not the first who may have become interested in any given blind person. What has gone before is of prime importance and usually this is known to the agency in touch with the blind person.

To be a successful volunteer involves more than "good intentions," and more than merely money. Any group or individual that merely signs a check, tends to lose interest in the service itself. Paying for a specific service for a specific blind person may be quite different, and may often be combined effectively with volunteer work.

Volunteers owe it to the blind, as well as to the agencies with which they work, to be reliable, regular, and prompt. Keen disappointments to the blind have resulted from a "last-minute" cancellation of an engagement with a seeing person. Any confidences the blind may give must be respected. Volunteers working with agencies become a part of these agencies and must be willing to accept direction and to conform to the accepted standards and ethics of work for the blind.

Before an agency accepts volunteers it should know that it can give them work to do which is worth doing. Many volunteers have been lost to various fields of social work by their having been reduced to mere "flunkies." While it is true that all volunteers cannot do all things, yet it is also true that most of them recognize their own limitations and know that they cannot expect to do the same things as are required of the professional staff. Interviews before a volunteer begins work, followed by competent supervision on the part of the agency, will save a great deal of misunderstanding. Volunteers are individuals, too. Therefore they enter work for the blind with varying capabilities. Agencies should be prepared to reward competent volunteer service with more responsibility—if that is what the volunteer wants.

Volunteer work on behalf of the blind will naturally com-

plement the work already being done in a given community. It should be related to other volunteer service in the community, especially if there is a Council of Social Agencies which sponsors a Volunteer Placement Bureau. Training courses on the social work structure, including work for the blind, are invaluable to all volunteers. In order that individuals or groups may find out the particular local needs of the blind, and the extent to which these needs are being met, they should become acquainted with the local and state organizations working on behalf of the blind and then prepare to work in co-operation with them.

When you consider going into volunteer service with the blind there are at least three questions which naturally present themselves:

1. Who are the blind people to be helped?
2. How can you get in touch with these people?
3. How can you help most effectively?

Who Are the Blind People to Be Helped?—If you are in a city where there are public and private agencies already working on behalf of the blind, you can consult these agencies. You may be in a city where there is an institution for the blind. If you do not know about your community's organized resources for the blind, consult your Community Fund or Council of Social Agencies. Another resource is your state agency for the blind. If you are unable to secure the information within your city or state, write to the American Foundation for the Blind. If there is no organized work for the blind in your city, you may wish to consider sponsoring a survey to learn their number, their condition, and needs.

How Can You Get in Touch with These People?—If there are already various public or private agencies at work in your community, you can learn through them how you can best help and how you can get in touch with the blind individuals. Should it be necessary for you "to start from scratch," the survey will undoubtedly give you the opportunity to establish relationships with the blind people in a very natural way.

How Can You Help Most Effectively?—In answering this question it is natural to consider the differences in the blind people to be helped whether they be children, students, or adults, and the different kinds of things which may be done for them. The following tabulation offers various suggestions for activities to be considered in conferences with other groups already at work on behalf of the blind:

THE BLIND CHILD.—Co-operate with the families of these children in regard to enrolment in a residential school for the blind or a public school class for the blind.

Arrange holiday entertainments, Christmas celebrations, Easter parties and summer picnics. You may wish to invite an equal number of blind and seeing children so that each may have the advantage of knowing the other.

THE BLIND STUDENT.—Assist blind students who wish to attend institutions of higher learning by providing scholarships.

Read aloud to blind students who are unable to secure braille text-books. Has your state made provisions for a "state reader's fee" for blind students in college? If not, what can you do about it?

Pay for someone to read to a blind student through his selected course at high school, college, or in professional study at a university.

Help meet the needs of blind students for special material in braille. With the increase in the amount of material available in braille, there is more and more need for specialization in brailling so that there will not be an over-supply of certain standard works and a lack of other material, equally necessary, but not so popular.

If a blind student is majoring in music, make it possible for him to hear the best artists. Concert managers will often give a few tickets to blind people if the problem is properly presented to them. Also secure volunteer musicians to dictate music so it can be transcribed into braille.

Provide the right sort of healthful recreation, physical and mental. Send poor students to summer camps for an outing. In many cases a blind person may be sent to a regular summer camp, if accompanied by a seeing companion who will remain at the camp throughout the whole period.

Help students to obtain equipment, such as Talking Book machines, typewriters, braille-writers, etc.

BLIND MEN AND WOMEN.—Read aloud either to one person or to a group.

Take a blind person to church, walking, shopping, or motoring. Distribute concert and theater tickets and see that the blind guests have guides provided.

Bring holiday cheer to blind persons in homes for the aged, county farms or almshouses; remember individual birthdays for those without relatives; give a radio and attend to repairs and upkeep of radios owned by blind persons.

Assist in every way possible in the marketing of work done by blind people in order to promote their happiness through occupation and earnings.

Promote, through personal influence, the interests of blind individuals who conduct small business enterprises, such as newsstands, piano tuning, magazine agencies, and life insurance agencies; employ blind persons to furnish music for group luncheons or dances—not merely because these persons are blind but because they are prepared to render competent service in their respective fields.

In addition to this wide variety of services for individual blind people, there are needed services which may be performed for the blind as a group. For instance, some League of Women Voters or certain individuals, might be more interested in "promoting a cause" than in working with blind individuals. Such groups or individuals should get in touch with the state agency for the blind to learn what legislation is under consideration and inquire how they may help to secure its

passage. In some states, blind persons have been exploited by promoters who have made appeals in behalf of the blind which have not resulted in actual benefits to blind people. Legal restraint of such exploitation may be necessary. This is the sort of project in which volunteers can give effective help by advertising the need for action. Services which will benefit all blind people are always needed and volunteers can well be enlisted in such a program.

The specific things to be done in a given community—whether for individual blind people or for the blind as a group—will depend upon what is already being done by public and private agencies and the volunteers allied with them.

In closing, I should like to quote the following from "Volunteers in Social Work" by Natalie Linderholm in the 1937 *Social Work Year Book*: "The volume of volunteer work accomplished, however great that may be, is an imperfect measure of the value of volunteer service. Its greater and more lasting values are inherent in the strong bond of understanding which it cements between social work and the community. To each, volunteers speak with the authority of experience; because of that their influence is great in establishing new services and in assuring the maintenance of standards, in interpreting to social work the significance of community attitudes and values, and in interpreting to the community the vital relationship of social work to useful living."

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What Should Be Done for the Deaf-Blind

Helen A. Keller, L.H.D.

Dear Reader, can you picture yourself a castaway in a sea of double deprivation—loss of sight and hearing? Like Cowper's castaway you would drift beyond the human voice and the will to rescue you. Still throbbing with human emotions and desires, you would feel through the sense of touch that there exists a living world, and desperately but without avail seek an escape from your utter isolation.

Although there has never been an accurate census of the deaf-blind in America, it is certain that there are hundreds who have "sunk beneath the whelming tide." All their pleasures have vanished. Even work, man's divine inheritance, they have lost. Family and friends may try to comfort them, but consolation cannot restore their usefulness or atone for the want of it. They must have diversion and something to do, or earth and heaven will remain empty to them.

What complicates the problem further is that they are so widely scattered over this great land the public does not realize what a number of them there are. The majority are adults. Many live in almshouses or homes for the blind or the deaf, where there is not always understanding or sympathy, in mental hospitals or lodgings or in their own houses with little or no help.

Few even among the most imaginative and tender can have any idea how this environment increases the many-sided strain upon the mind and nerves caused by their twofold misfortune. The blind live in a world of sound, they can take part in family life, social gatherings and even occasionally render outstanding service to the public. The deaf use their

eyes instead of ears. They perceive the love and joy or sorrow in their friends' faces, they can travel.

But the deaf-blind have no substitute for sight or hearing. More than any other handicapped group they need devoted, patient friends to break the cruel immobility that causes their days to be alike in the smallest detail—to take them out for walks, to find fragrant flowers for them, to cheer lonely hours with bright talk or braille letters they can read with their fingers.

The deaf-blind are revealing today undreamed courage and self-help—gleams from man's invincible soul. In three countries they have banded together for mutual assistance. In France there is the Association Fraternelle Entres les Aveugles-Sourds de la Langue Français, with a magazine *Aidons-Nous*, ably edited by Yves Guégan, himself without sight or hearing. In England the National Deaf-Blind Helpers League is very active, and its messenger of good-will, *The Braille Rainbow*, carries into shut-in lives most of the sweetness they know. Two years ago some deaf-blind Americans formed the Golden Bluebird Club. With scanty funds and hardly noticed by normal people, they have published every month since a lovable little periodical, *Good Cheer*, edited by Mrs. Bertha Cornelius, 712 Madison, Topeka, Kansas. It touches me to tears how they share their few joys and lessen one another's heartache.

If they can do this single-handed, how much more they can accomplish if reinforced by intelligent co-operation! What they should have is aid given by tactful volunteer visitors. I mean people of leisure and means willing to spend time each day with the needy or neglected deaf-blind, charm away their dark moods, show a sincere interest in their doings and even unreasonable whims, give the latest news from the outside world, find solutions for embarrassing domestic problems, in a word, to do the uncounted, nameless, yet precious kindnesses that may keep the shut-in's mind healthy and his heart full of light. Let it be remembered, the deaf-blind children who are being taught will grow up. What are they going to do with their education and capabilities if there are no special friends

trained to be ears, eyes and interpreters for them in the unpredictable vicissitudes of life?

Hundreds of people have learned the hand alphabet and braille in order that they might communicate with me. I am confident that those who take the trouble to search out the deaf-blind will be amply rewarded when they see the blossoms of courage and happiness they have created in the most solitary lives on earth.

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The Story of Books for the Blind

Lewis W. Rodenberg

In Far Distant Times

A NEW dawn of philanthropy, which was perhaps the first true dawn, broke upon this troublous earth shortly after the middle of the eighteenth century. During this period, France, with her glorious depth of social instincts, gave to men among other things the first school for deaf-mutes and the first school for the blind. As to the blind, the time preceding this dawn, and extending backward through the Renaissance indefinitely into the Middle Ages, may be called the Era of Speculation. All manner of primitive things were thought of and even tried by way of educating isolated blind individuals here or there—letters were carved on wooden blocks, or pressed on wax tablets, or hung on thread; but nothing of a general or permanent nature came of these attempts.

Indeed, it required centuries for the human mind to convince itself that the lowly blind could and should read at all, that they were deserving of education. As late as 1750 the philosopher Diderot was thrown into prison for his unorthodox guesses about the ability of the blind and the effect of blindness on intelligence.

Beginning of Education of the Blind—The Roman Letter Era

And what may not the inspiration of woman accomplish? In 1780 Maria Theresa von Paradis, the cultured blind baroness

of Austria, a composer and skilled organist, performed in Paris and was entertained royally. Her attainments captured the admiration of one Valentin Haüy. At the time he was engaged by French business concerns in translating their foreign mail. Already he had been touched by the misery of blind beggars who haunted public places. His inspiration to bring them better mental and social status fired into resolve and action. In 1784 he induced a young beggar, François Leseuer, to be his pupil, and the next year, with the aid of the French Philanthropic Society, opened the first school for the blind. Quite by accident Leseuer one day made out the imprint of a few letters left on one of his teacher's papers by the printing press. Forthwith Haüy experimented with type to emboss books, trying out various forms of letters used by the seeing. He chose a modified form of Roman letter and printed the first books in relief.

Then came the Deluge. After the smoke of the French Revolution and the first Napoleonic campaigns cleared away, the dawn of the humanitarian movement continued to spread over the world. The school of Haüy had been taken over by the State. Following his example, promoters here and there on the Continent and in Britain opened asylums and schools for the blind. This period, which was characterized by the beginnings of things for social uplift, continued for eighty or more years. Schools for the blind dotted the globe, last of all coming to Japan and China.

As to raised print, this same span of years may be called the period of the Roman letter. Numerous and persistent were the efforts that were made to modify this type in order to make it more legible to touch. Naturally the solution of the reading problem of the blind was sought by most men in the experience of the seeing. "The fact is," comments Pierre Villey in his great book, *The World of the Blind*, "they were talking to the fingers the language of the eyes." Discouragement was in the air from the start, and very soon it was found that points (first Roman letters outlined in pin points) were more tangible than the blurry line letters, yet books in line letter were pub-

lished to the end of the nineteenth century by some presses, but in ever decreasing number.

Moon Type

Arbitrary codes composed entirely of dots began to appear as early as 1819 but these did not take root deeply for half a century. Between the time the dot codes emerged and the time line letters were submerged, all manner of far-fetched plans came to the surface. Some of these proposed entirely new systems made up of lines, angles, curves and even dots in various positions and combinations, while others proposed extreme modification of Roman letters. The most successful of the latter efforts was made in 1847 by Dr. William Moon of Brighton, England. He used some of the Roman capitals in bare outline, as, for example, capital A without the cross-stroke. Other letters were purely arbitrary but simple, as an oblique line tilted leftward for R and rightward for S. At the end of the line the finger was led downward by a curve to the next line, so that reading was from right to left on alternate lines. Because of the legibility of this system it gained much vogue in England and America. In 1884 Moon was the official type in thirty-six British institutions. And to this day it remains the system used by home visitors of the adult blind for those of their pupils who are unable to master braille. A considerable library of Moon books has come into being and there is a Moon edition of a weekly news sheet in addition to six other Moon periodicals in England and two Moon monthly magazines in America. The system is read by only two or three per cent of the reading blind and is all that remains of the long-lived line letter era.

The Ascendency of Braille

After the middle of the nineteenth century a new period began in the history of touch reading. It is not so well defined as to its beginning, extending in general over the last third of

the nineteenth century and the first third of the twentieth. Nor may we at first glance distinguish who deserves to be singled out as the leading actor on the new stage. But before tracing the ascendency of braille, let us return to its obscure nativity back in the years when line letter experimentation was still occupying most teachers of the blind.

Louis Braille

In a little old stone hut at the foot of the stony hill of the village of Coupvray, twenty-six miles east of Paris beyond the Marne, Louis Braille was born on January 4, 1809. His father was a harness-maker. At the age of three the child blinded himself while playing with one of his father's awls. At the age of ten he was sent to the Paris institution for the young blind. At seventeen he was made a junior master and at nineteen an instructor.

In 1819, the year the boy came to Paris, Charles Barbier, an engineer and cavalry officer interested in signal codes, brought forward the first system of points in arbitrary arrangement. He grouped his points in successive "cells" along the line, each cell containing twelve possible points arranged six high and two wide. He invented a writing board with grooves over which the paper could be laid and impressed with a stylus. Over the paper was fixed a thin metal plate with window-like openings to guide the stylus to the positions of dots in the cells. Barbier's system was exhibited at the institution where its possibilities tantalized more than one imagination. It was phonetic, like shorthand, instead of alphabetic; the characters were too tall for the finger tips; the constructions were complicated; yet here was the real genesis of great things to be. Barbier was the father of point reading.

Louis Braille, before he was twenty, through some inspiration of which there is no record, designed an alphabet of the upper half of the Barbier cell. The braille cell, then, became three points high and two wide. His constructions of signs were systematic in the extreme, though brilliant and simple.

Out of the upper four points he made ten basic characters, and from these in turn he made thirty more by adding points from the third level, first the lower left point, then both lower points, and finally the lower right point. Without going farther into this system, suffice it to say that the arrangement of all sixty-three characters possible in the two-by-three cell was cleverly methodical. In the main he seems to have disregarded the fact that some of these characters are more legible than others and that certain letters of the alphabet occur much more frequently than others. Louis Braille used no shorthand signs, as did Barbier, and would probably have objected to the contractions or abbreviations of words nowadays. By 1834 he had worked out his system in great detail, including a musical notation which, in all of its essentials, remains to the present time capable of presenting to the blind all varieties of musical composition.

He held organ posts in churches of Paris, being a musician of considerable ability. It is said that he was permitted to teach his point system to only a few pupils after hours. All his life he was without robust health. His death occurred in 1852, two years before his system was officially established in the institution where for a quarter of a century his genius had worked so modestly and so effectively.

By 1860 rumors of the novel system had gone abroad and it was not uncommon for blind persons from distant lands to write to the Paris institution for the strange writing tablets. Some of these reached America and in 1859 the new school at St. Louis was the first in America to adopt braille.

Dr. Armitage

The era of the ascendency of braille really began when Dr. Armitage of England went forth as the "Great Missionary of Braille," to use Dr. Ritchie's designation of him. Armitage had only partial sight and had a first-hand knowledge of the problems of finger reading. He became the center of a group of able blind individuals whom he organized into the British

and Foreign Blind Association. Observe that their torch was more than a local light: work for the blind, as all philanthropy, was asserting its international conscience. Always, with few exceptions, newcomers into work for the blind have grappled, one after another, first with the problem of reading. So it was with Valentin Haüy, the first educator of the blind; with Klein in Austria and Zeune in Prussia; with Drs. Howe and Friedlander pioneering in America; with Frank Hall and Edward Allen who held Thermopylae for braille against its greatest foe, New York Point; these and other educators played with embossed type as soon as they saw their pupils seated at desks without adequate textbooks. A great teacher not only will instruct from books but will see to it that books are made. So, too, it was with the greater organizations—with the American Association of Instructors of the Blind in 1871, with the international congresses of teachers of the blind which began in 1873, with the American Association of Workers for the Blind in 1905, with the American Foundation for the Blind in 1921, and with national associations in France, Germany, Italy and elsewhere. And foremost among these stands Dr. Armitage and the British and Foreign Blind Association, 1868. They determined that the vexing problem of types must be settled once and for all so that the building of a standard library might proceed. Even New York Point, the newest of codes at that time, was given long and unbiased scrutiny. Their decision was unanimous in favor of braille. This was little short of audacity, for when the investigation had started, the braille cult in Britain numbered only a dozen individuals, while other systems were in use in a dozen or more institutions.

New York Point

But what was this New York Point system which could debate the ground with braille before the Armitage Council? In America, too, there was a great missionary for punctiform type, as determined as Armitage to find a new answer to an

old question. Director William Wait of the New York Institute conducted numerous well-planned experiments from 1859 to 1866 to determine legibility of prevailing systems. He proved line letter inferior to point systems—yes, to braille. Perhaps no one in the world had ever handled the matter with better science and, no doubt, he felt like that about it. The braille system was a foreign infant but little known beyond its cradle. True, the young school in St. Louis was using it, be it admitted, with an amazing record of reading ability among its few pupils. But Wait had respect for the principle of frequency of letter occurrence, which respect the braille system did not show. Only sixty-three characters were possible in braille. Wait had in mind a dot arrangement which admitted of many more, an arrangement two points high and variable from one to four points in width. Some say he got this idea from his predecessor, Dr. John D. Russ, first director of the institution. Be that as it may, Wait claimed the invention and for a certainty worked out the details of it. He assigned his simpler characters to those letters of the alphabet which are overworked, and his whole system, including a full musical notation, was scientific and clever to the last detail. The American Printing House for the Blind at Louisville, Kentucky, had just started its work. Wait influenced its trustees to add his to the three or four other systems already being printed there. By 1890 the Wait banner flew everywhere in America but its triumph was de jure rather than de facto. In some schools music braille was preferred. New York Point had remarkable merits as well as a militant promoter. Had braille failed elsewhere in the world, William Wait would today occupy the place of Louis Braille in our esteem.

Braille Crosses Frontiers

In 1873 began international co-operation in the first congress of teachers of the blind in Vienna and Dr. Armitage there carried his campaign for braille abroad which he had begun at home. International committees began to work. The braille

principle was noised about, played with, and fought over in an ever widening field. So ardently was it advocated that ten years after the first congress Dr. Armitage claimed that braille was being used in every institution in the world excepting a few in North America: it may have been used, but it was far from established. All the way from Philadelphia to Warsaw local reformers advanced rival systems, but one by one they failed.

Even Cupid enlisted in the cause of braille. It is told how, in a midwestern school, in the early 70's before any point code was recognized by the authorities, a few pupils had procured braille frames. The lovelorns of the institution, under strict segregation, wrote each other strangely legible notes of consolation—legible to themselves but not to the authorities. Forthwith the evil instruments were confiscated but were shortly returned because with them the students could make remarkable progress in music as well as in love. The music master could now dictate the piece to the pupil who, with this newfangled tablet, could write, read and keep the music instead of getting it by ear and forgetting it.

Braille had crossed frontiers and had entered the hearts of the blind. However, in the 80's its triumph was far from certain, for over half of the British institutions were using Moon type and all of the American schools New York Point, while line letter books were still being produced.

More Confusion and Strife

Far-seeing and courageous advocates were indeed needed. By this time rival codes of great merit were entrenching in the field. Very early there were dissenters in the braille ranks. In 1876, at the second *Blindenlehrer-Congress* in Dresden, a German clique attempted an international coup to revise the braille alphabet on the basis of letter recurrence, but in a few years this uprising was stayed. In 1878 similar heresy flamed up in America and had official support.

Joel W. Smith, tuning master in the Boston school, en-

couraged by Director Anagnos, and also applying the principle of letter recurrence, worked out the so-called American braille which he announced at the Columbus convention of the American Association of Instructors of the Blind in 1878. He retained only twelve letters of the orthodox alphabet and redistributed all other signs, but did not alter the music notation. Smith made one notable contribution to the good of all braille: he insisted on capitalization and provided a very legible capital prefix. The awakening of a conscience for exact transcription was timely. Wait's capitals were a bit clumsy and were being dropped, as also was the braille capital prefix in Europe. In 1890 American braille was endorsed by a committee of rebel instructors of the blind whose aim it was to pull down as many Wait banners as possible. In 1910 they forced the American Printing House for the Blind to print a portion of its books in the new system, so that this plant for several years produced books in two distinct types—New York point and American braille—both of them out of line with orthodox braille. Thus was confusion worse confounded, while arguments, jealousies and wasteful duplications ran riot.

A Great Invention

Yet it was one of the offenders against uniformity, one who came uninitiated to the work and failed to resolve the existing chaos, who, nevertheless, in a few short years, achieved great things which, some claimed, rank him second only to Louis Braille.

Frank H. Hall was made superintendent of the Illinois School for the Blind in 1890. Coming fresh from the greater world of education, in which he had gained wide recognition, he at once deplored the scarcity of embossed textbooks, the clumsy method of writing with a stylus on inverted paper, and the primitive equipment for embossing. By May, 1892 he had aligned himself with the new American braille movement as against New York Point and had originated a braille typewriter capable of five or six strokes per second. The machine

was equipped with six keys, one for each of the points of the braille cell. Any one of the sixty-three characters could be made at one stroke by depressing the required keys.

In Europe it was beginning to be the practice to print braille books not from movable type but from thin metal sheets upon which dots were embossed by means of a mallet, a stylus and a frame. Mr. Hall enlarged his writer to stereotype metal sheets with foot power. His machines were shown at the Chicago Columbian Exposition in 1893 and arrangements for their manufacture were concluded. They made their way to institutions here and there throughout America and Europe. Textbooks in greater abundance were now possible. Libraries of books and music scores began to grow. Hall had aligned himself with braille because of its mechanical simplicity. This feature was forever one of the elements of strength in the system, accounting also for its legibility. Frank Hall had stemmed the tide of New York Point and, by supporting the braille principle, opened the way to its universal victory.

Triumph of Braille in the United States

After 1900 books in line letter began to disappear and American schools were almost equally divided between New York Point and American braille. The duplication of books and magazines in the latter two systems was a colossal waste; and, worst of all, blind people had only half of the possible library.

The first organized complaint came from a group of blind people who held a charter meeting in St. Louis in 1895. In 1905 this organization became the American Association of Workers for the Blind and appointed the first Uniform Type Committee. In 1912 the committee tested twelve hundred American and British readers and made a most exhaustive report. British braille stood highest but with some of its weak spots uncovered. Acting in part on scientific findings and in part on the hope of compromising the doomed factionalist, the committee created a system of its own called Standard Dot

which combined the orthodox braille alphabet with a number of New York Point features. Battles and investigations continued. Conversion to the international ideal was painful and stopped half way in 1917 with the adoption of a portion of the British list of contractions. In 1905 the British had worked out three grades of braille: grade one, fully spelled; grade two, moderately contracted; grade three, highly contracted. This was called Revised braille. The American committee chose only part of grade two; hence the designation, grade one and a half. All of the word abbreviations and the two-cell contractions of grade two were refused and the capital and italic signs were reversed.

Americans generally were of the opinion that the British certainly could and certainly should read the new grade by way of establishing uniformity. With pioneering courage American presses scrapped old plates and began all over again to build a new library. But the British blind did not read the American books. No, they weren't still fighting for George III, as some thought: in reality they were held back by a basic fact in the braille system itself. And what could this be?

Many of the more legible signs are not in the alphabet but are used as contractions. Grade two is more condensed than grade one and a half and has less dots. Why should he, the British reader, track his fingers over eleven per cent more line-length, many unnecessary dots and unaccustomed word forms? Why should he increase every hour of writing by seven minutes of extra work? Grade one and a half, with forty-four contractions—about as many as the gone-but-not-forgotten older systems had—had accustomed American readers to use only about one-fourth as many contractions as the British readers were using in grade two. At first American courage paled at the thought. Nevertheless large numbers of books were ordered from England to supplement the young library in the United States. In 1922 the first key to grade two was published unofficially in the States. More and more blind people were training themselves to read Revised braille, now keenly conscious of the injustice of bygone confusions. With

increased experience many American readers began to share the objection to tracking their fingers over unnecessary lines and confused word forms. As was ever the case, the braille system was being ushered to its universal triumph by the intimate experience of the blind themselves. Why, it was beginning to be asked, should the waste of duplication of books in grade one and a half go on when these books were certain to be replaced in time by preferred editions in grade two?

Standard English Braille

The American Foundation for the Blind was created in 1921 and in 1923 the American Association of Workers for the Blind designated it to carry on such work as was left unfinished by the retiring Commission on Uniform Type, the latter having carried on since 1915. Out of the preceding decade of struggle had come veterans trained to heroic vision, purpose, and sacrifice. They had paid dearly for America's half century of waste and want of leadership in the serious business of making books for the blind. The American Foundation for the Blind was the culminating inspiration of two of the veterans, and their inspiration received general support. One of these was H. Randolph Latimer, then principal of the Maryland School, a blind man of the New York Point camp who had guided the Commission on Uniform Type to its final achievements, and in whose vision was born the idea of the American Foundation for the Blind. The other was M. C. Migel, a seeing manufacturer and humanitarian, who early enlisted the full strength of his insight and means to support the type committees and finally to establish the Foundation.

In due time Robert B. Irwin became Executive Director of the American Foundation for the Blind, a blind man, who was to pilot the way to final standardization. He influenced the adoption in America of a standard size of page and of two-side printing. The American Foundation for the Blind, with

the co-operation of the American Printing House, in 1925 published a key to music notation which included universal usages; and, in co-operation with Mr. George L. Raverat of the American Braille Press in Paris and other European authorities, promoted the Paris conference on braille music in 1929 which resulted in international standardization of the musical code. In this year, too, Irwin and others sensed that the tide of preference in America was definitely turning towards grade two.

To determine the value of certain braille signs, the American Foundation for the Blind compiled exhaustive tables of words and gathered other data which were to play a convincing part in the negotiations that followed. Both British and American authorities were impressed that the time was ripe to accomplish final standardization of usage in the English speaking world. This aim was realized in July, 1932, when a conference of duly authorized representatives of both countries met in London and concurred on a revised form of British braille that was called Standard English braille. Thereby America adopted most of grade two, the British sacrificing some of the less useful contractions and accepting the reversal of the capital and italic signs. Certain compromises on rules of writing were also agreed on. A handbook setting forth Standard English braille was edited by the conference and is now used in all English speaking lands.

In rapid succession printing houses and organizations accepted the handbook, so that at the time of this writing there is virtual uniformity, although for the moment, here or there, die-hard traditions persist, as, for example, the noncontraction of over-lapping syllables. Suffice it that the intimate experience of blind readers will have its say in the end, as it always has had in the long approach to uniformity. Standard English braille is now the system of reading and writing used by about 6500 school children in America and about 30,000 adults, and these figures are approximately duplicated in the British Empire.

Thus, a century after its birth, with rival codes defeated

and with itself groomed to uniformity of usage, the braille system stands as one of the greatest benefactions to mankind. Worthy indeed is the plan now being projected to collect pennies of grateful tribute from the blind of all the world to erect a monument of fitting proportions to the memory of Louis Braille.

The Talking Book

At the very moment of its triumph the braille system suddenly saw its late champions usher in its newest and most powerful rival. In the late twenties George F. Meyer, blind supervisor of braille classes in the Minneapolis public schools, a trustee of the American Foundation for the Blind, began to use dictaphone records for class reading. Why, it was questioned, could not such a method be used by the thousands of blind people who are slow readers or cannot read at all? By May, 1932, the resourceful imagination of Robert Irwin of the American Foundation for the Blind had developed the idea into a Talking Book laboratory to work out the problems of long-playing records, nonbreakable disks, and a machine suited to operation by the blind.

The story must be told elsewhere how the American Foundation for the Blind has undertaken to make a library of recorded books and how other organizations in America and abroad have entered this field. Nor may we try to evaluate in detail the Talking Book as a means of reading. With approximately twenty-one thousand Talking Book machines distributed among the blind of the United States, mostly as loans, and with a vast majority of the readers enthusiastic in their use, it is certain that this form of book-making for the blind will endure. In the final analysis, however, ear reading is a kind of indulgence; touch reading is a kind of necessity. Writing, which among the blind means braille, has become an indispensable means of enhancing mental and even vocational powers and methods. The Talking Book will probably replace the braille system to a greater extent among adult readers than

in schools for blind children, although its invasion into both fields may be less than some would conjecture.

The average speed of braille reading is less than one hundred words a minute, while that of record reading is about one hundred and eighty words. In general, the latter method is preferred for the reading of narrative and drama, while braille is preferred for instructional or meditative reading which cannot be fed through the mind at a uniformly mechanical speed. Braille has endured because it can be written as well as read by the blind themselves and because it is practical to the blind in music and mathematics—advantages which the Talking Book may never afford with equal facility. Yet the twentieth century has produced no benefit to the blind which surpasses the Talking Book. It will bring to tens of thousands of visually handicapped people that glorious uplift of mind and spirit which literature alone can give in such measure—an uplift which many could never enjoy without the Talking Book.

On the Reading of Braille

Obviously blind people read with their fingers. There have been cases of touch reading with the toes or with the tongue by unfortunates who had no hands. Several books have been written of late on the technique of finger reading, presenting data and conclusions derived from elaborate experimentation. In Germany, for instance, a test seemed to prove that the best reading by the blind was done with the left hand, though this has not been borne out by experiments made elsewhere. It is safe to say that the right index finger gets the brunt of the work and is supported by the left index finger which either reads part of the line or keeps the place at the left margin. Often the middle fingers are used alone or in conjunction with the index fingers, while in rare cases a kind of span-vision is achieved by three or four fingers together. Usually the book is held parallel with the desk but in some cases oblique positions are preferred.

The average speed of braille reading approximates one hun-

dred words a minute, though some have claimed to double this record. The rate of public speaking is from one hundred and fifty to one hundred and sixty words a minute, while practiced silent reading with the eyes may cover five hundred words. To keep up the speed of braille reading is a challenge to educators of the blind, now that the Talking Book threatens to weaken the reading ambitions of pupils. If reading is not easy for the individual, the braille system cannot give him that degree of independence of seeing help of which it is capable. An excellent stimulus to the development of reading is the practice of holding inter-class and even inter-school competitions. Such have been held in Great Britain for a number of years and perhaps account in part for the superior reading ability of blind people in that country. The more fluent the reading, the more even is the movement of the hands, but even in most of the rapid cases there is a tendency to move up and down in a slight undulation. In extremely poor reading this tendency amounts to an impatient rubbing motion. Thus, touch reading has been described as being either synthetic (fluent) or analytic (interrupted).

In braille as in print, word forms are factors in reading. The more the individual reads, the more automatic will his perception become. Therefore the symbols which constitute the word should appear always in the same construction. As before stated, the contraction of braille speeds up reading. Naturally, then, to make fluency of braille reading possible words should always be contracted into the same word forms. This is at the core of the demand for uniformity. When embossers violate this principle, they lay many little stumbling-stones in the path of the finger.

Standard spacing of points was recommended in 1917 by the Commission on Uniform Type. The distance between centers of adjoining points was fixed at .090. This makes the average braille character, including the spread of its dots, a little more than an eighth of an inch wide and a little less than a quarter of an inch high. The spacing of letters along

the line is now exactly one quarter inch. The distance from line to line is .4 of an inch while the height of dot varies, being difficult of exact measurement. A cell of a larger projection is quite commonly used for the adult beginner.

For those initiated in touch reading there are many interesting problems—perhaps there are undiscovered possibilities. There are the problems of the primary classes of children where, for example, it is asked if it be advisable to teach contractions from the start; the problems of the middle grades where it is asked if full syllabication is essential to good spelling; the problems of singing classes where it is asked if words and notes may be written together for sight-singing; or the problems of teaching the newly-blind adult which are indeed difficult. In these places are the front trenches where are fought the real battles against blindness. But fuller discussion of these and other questions must be found elsewhere.

On the Writing of Braille

The oldest and still most used method of writing braille is by means of the grooved or pitted metal tablet first used by Charles Barbier. In this writing with the stylus the face of the sheet is down and writing is from right to left with a reversal of the letters. When the sheet is turned over, the characters are in normal position for reading from left to right. Stylus writing is simple enough, for the back-side thinking of the characters soon becomes automatic. The average speed of such writing is from ten to fifteen words a minute, which is about half the average for pencil writing by the seeing.

The braille typewriter, as invented by Frank Hall in 1891, has already been described. Similar writers have been manufactured abroad. Recently the American Foundation for the Blind designed an improved model of the Hall machine which is now manufactured for the Foundation by the L. C. Smith & Corona Typewriters, Inc. On most braille typewriters the characters appear before the operator and

may be read at convenience. Such machines, therefore, serve the blind for composing manuscripts or working mathematics in the same way that the typewriter serves the seeing.

A highly contracted form of braille known as grade three is used by a small number of students and professional blind persons. There is also a shorthand system employing phonetics. Braille shorthand machines are made which write on a ribbon of paper wound on spools. The speed of writing depends on the operator and on the degree of contraction which he chooses to use. An efficient operator of the braille typewriter may average from forty to sixty words a minute, while the average is considerably higher for practiced writing on the shorthand machine.

On the Printing of Braille

Punctiform printing was first done from movable type; later from thin metal sheets cast from such type. Paper placed over embossed type or sheets will receive full impression under a rubber cushion. Such paper must be about twice the weight of ordinary book paper. It may be dampened prior to printing so as to yield more perfectly to the embossing process. Softening is also effected on some modern presses by electrically heating the plates and using paper of a resinous or tar base which responds instantly to the heat.

Movable type is no longer used. About 1889 the hammer and punch method of punctating zinc, tin, or brass sheets began. But the Hall stereotyping machine appeared, and very shortly afterward a similar machine, called the Stereograph, for printing New York Point, was designed.

Line letter was embossed on only one side of the sheet, although books were sometimes made in which adjoining pages were pasted back to back to give the effect of two-side printing. One-side printing naturally continued after point systems came in vogue. But when the use of metal sheets became the fashion in England and Germany the practicability of two-side printing was soon established. This consists

of using a folded sheet, the impressions being stamped through both laps at the same time. The laps are separated and the paper insinuated between them. When pressure is applied, the inner points meet the inner pits and shape the paper, as if a layer of dough were pressed between two saucers. If the lines are slightly separated, it is possible to write between them on the opposite side, so that the paper is embossed on both sides at the same time, the inner pits from below pushing up and those from above pushing down through the paper. Interlining gradually gave way in Europe after 1900 to interpointing. This method fills both sides of the page with lines normally spaced, the machine being set so accurately that the points of one side fall between those of the other. American presses continued one-side work until Robert Atkinson, founder of the Braille Institute of America in Los Angeles in co-operation with the American Foundation for the Blind began publishing books by the interpointing method, and until Robert B. Irwin of the Foundation converted other embossers to the European practice.

Late in the 1920's the Experimental Shop of the American Foundation for the Blind worked out an improved model of the stereotyping machine which is manufactured under the supervision of the American Printing House for the Blind. Now and then a plant with sufficient funds will have its own machines constructed on original designs. In 1933 the American Braille Press in Paris left off embossing books and magazines in order to manufacture and distribute at cost or even free such printing equipment as might help remote institutions in backward lands.

As to presses, most commercial models may be adapted to braille work. Presses have been made ranging all the way from small ones resembling clothes-wringers to the Bobst electric model of 1930 which prints 3500 sheets per hour from a continuous roll. However, large capacity production is not often needed. Probably only one magazine, the *Matilda Ziegler Magazine*, Monsey, New York, has over 10,000 readers. *The Weekly News* of the National Braille Press, Boston,

and the weekly edition of the *London Daily Mail* fall somewhat under this figure, while the *Readers' Digest*, the only inkprint magazine to be brailled from cover to cover, was reported by its braille publisher, the American Printing House for the Blind, Louisville, to have a 3000 copy issue in January, 1938.

The extent of braille book printing has reached large proportions. In 1937 the American Printing House for the Blind stereotyped over 64,000 plates, while the output of the National Institute for the Blind in London is approximately as great. The latter institute has four miles of steel shelving for the storage of braille books, sealed air-tight ready for shipping.

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Some Comments on the Library Service for the Blind

Lucy Armistead Goldthwaite

A revolution has come about in the reading habits of the blind. It came unheralded and has scarcely yet been recognized. It is a revolution in sound, bringing an unmistakably important blessing to many of limited vision and creating for lending libraries the unique problem of developing a service based on the medium of sound recorded books. The project is certainly of interest. In the first place sound recorded books are not to be considered as substitutes for books in ordinary print. Their non-committal, black disks are not expected to compete in charm and usefulness with the familiar, companionable printed volumes. But the speed and ease with which these same blacks disks convey thought to the listener make one wonder to what extent the preference for silent reading will stand up with those who must pursue it through the sense of touch. The extreme slowness of finger reading, and the tedium of mastering its technique, will tell mightily against it with adults accustomed to visual reading as well as with many now versed in the intricacies of braille. The popularity of the new medium is amazing. Though it is less than four years since the first books were recorded and though the library service is functioning under obvious difficulties, a greater amount of reading is being accomplished today through the sense of sound than through touch. And touch has been the only medium used since schools for the blind were established here over a hundred years ago.

These first schools were established in 1832. The first book was embossed in that same year. The first Congressional appropriation for books for the blind was made in 1858.

The first libraries were opened in the eighties and nineties. The free mailing law permitting free circulation of library books by mail was passed in 1904. A uniform type for the United States was adopted in 1917. Uniformity in the use of contractions between the two English speaking countries was reached in 1932. And in this same year of 1932 a laboratory for the development of the Talking Book was established by the American Foundation for the Blind. A coincidence not without irony.

The group of twenty-seven libraries now engaged in the Talking Book service undertook the work as a matter of routine business. The history of these libraries forms a modest illustration of "rugged individualism." The older ones established in the eighties and nineties and at the turn of the century, were intended to serve only their own communities. Their founders had no thought of a unified scheme of service, which the free mailing law later made possible. For no such law existed. The libraries sprang up here and there in answer to some purely local demand. Now it is an indisputable fact that the percentage of readers among the blind is limited for reasons not difficult to find but which need not be related here. So in 1904 when the free mailing law was passed, it was probably scarcely less a blessing to the libraries for the blind than for the blind themselves. For it permitted them to extend their territories and thereby gain a larger clientele. As a result we acquired in time a sort of regional service from centers established with no thought of a co-ordinated plan, as their locations plainly indicate. Since 1904 no library should have been established without due regard to the location of other distributing centers throughout the country. Such wisdom is not to be expected, however, when local pride and local enthusiasm for a generous gesture are seeking expression. The policy of having only a few large library collections administered by an expert staff has always been enthusiastically advocated by blind readers themselves, and the soundness of this policy is acknowledged by those familiar with conditions. But such desirable co-ordination as this im-

plies, could not have been effected without control from a central agency. Instead, a number of small libraries were established, some of them passing out of existence as local patronage decreased.

As time went on a few of the libraries acquired by purchase much larger collections than others. They were thus unevenly developed, and conditions were further complicated by the lack of a uniform type in this country. Beginning in 1833 we have developed collections in line letter, New York Point, and American braille. Built them up and discarded them. In 1917 we secured a uniform type and began a fourth collection. This was in braille, grade one-and-a-half. In 1932 we officially abandoned this for braille, grade two, in all publications for adults. Under such circumstances effective co-operation was well nigh impossible. On account of the disparity in book stock no definite geographical areas could have been assigned to the respective libraries but an effort toward co-ordination might have been made by the development of certain subjects by certain libraries. Except for the development of a music collection by The New York Public Library no such attempt was made. For many years the only evidence of organization was the fact that a number of the libraries had set definite limits for the circulation of their general book stock and extended their service farther afield only for books not available elsewhere.

In 1931, through the efforts of the American Foundation for the Blind, the Pratt-Smoot bill was passed. This law provides an annual appropriation of $100,000 for books for the adult blind and places the administration of these funds under the Library of Congress. The books thus supplied by the Federal Government are deposited in the twenty-seven regional libraries and in this way the cost of the service which hitherto had been borne entirely by the regional libraries is distributed, to some extent at least, among all the states. Since that date, definite geographical areas have been assigned to each and every library for the circulation of Government owned books, as these books form duplicate collections. A

definite limitation of territory is practicable only as long as this condition holds good.

The vast amount of space required by embossed books has always been a problem. This problem might be solved by the creation of a central reserve collection, where books in little demand could be retired. It is possible that in time some of the smaller libraries of both braille and Moon might perhaps be merged with this central reserve. As the call for embossed books diminishes the advantages of such a reserve collection where superfluous volumes may be deposited will become more and more evident.

With the coming of the Talking Book the picture changes. We need no longer ponder on the unwise investment of library funds in establishing little needed centers of distribution, for the easier technique of reading may eventually create a demand for many more than twenty-seven libraries. Nor ponder on our lack of a co-ordinated service in regard to the embossed books except as a warning for the future. As the twenty-seven Talking Book collections supplied by the Federal Government are replicas of each other, perfect co-ordination can be maintained. For the first time it has been possible to assign a definite division of territory to each library without modifying clauses and to require readers to use only one library. This in itself is a great gain in organization.

Library service to the blind is one of the least known of all library activities. That it functions almost entirely as a mail order department is generally known. But the dependence of a mail order service upon catalogues, so evident in matters of seeds and plants, household goods and clothing, is not yet fully realized when merely books and reading are concerned. Every nation that has established libraries for its blind citizens, should bring out a complete embossed catalogue of all its embossed publications. This would not be difficult to do. As the whole of the world's literature for the blind when pooled is still far from abundant, it should at least be possible for students to discover its whereabouts.

The process which made the recorded book possible was invented in the Edison laboratories about fifty years ago. As no commercial value attended the idea it was not used until the imaginative mind of Robert B. Irwin, the executive head of the American Foundation for the Blind, appropriated it for the benefit of the blind. The device of the Talking Book was worked out in the studios of that organization. But the Talking Book library service would never have materialized without benefit of Congress. The Talking Book was fortunate in its timing. In 1935 Congress voted the first annual appropriation of $75,000 for books for this project. Then it became clear that only a few blind individuals could afford to buy the forty dollar Talking Book machine which is an integral part of the Talking Book equipment, and the Government made a grant for the manufacture of machines with relief money to be lent to the needy blind. Over 18,000 machines have been so manufactured. In 1937 Congress authorized an increase of $100,000 to the book appropriation.

These Government machines have been sent to the various states in numbers proportionate to their populations and are loaned to the blind by state agencies. Now, to place a Talking Book machine is to create a reader. So the state agencies found themselves suddenly confronted with the responsibility of selecting readers by virtue of their distribution of machines. Under the regulations this selection is made on an economic basis. The machines are "to be lent to needy adult blind persons." If followed to its logical conclusion this policy would result in limiting the benefits to be derived from the entire project largely to the needy blind who, by and large, are not primarily interested in reading but in food and shelter. On the other hand, so many among the blind cannot be classified as needy, yet their slender pocket-books do not permit of the purchase of machines. Their very handicap places them usually under considerable expense. It seems unfortunate then that reading, free to others, should be contingent with this group upon the initial expense of a machine.

In distributing some 18,000 machines, nearly 18,000 new readers have been created in less than four years. Have the library facilities been adequate to this sudden expansion? They most decidedly have not. No one fully realized the work involved by the sudden shift from the slow perusal of volumes by touch to the quicker medium of sound, which sets a new high in speed, thereby causing a more rapid turn-over in book stock. The librarians find themselves serving a larger public reading at a faster pace. The care and handling of books on phonograph records is a formidable task. The container and records together weigh anywhere from eight to twelve pounds or more. Each book is in some eight to twenty and occasionally even more parts. Before discharging a day's circulation every disk must be taken from its envelope, examined for breakage, checked for omissions, and arranged in order for the sake of the next borrower. Disks omitted by readers are followed up by correspondence. Another time consuming circumstance is the obligation of the libraries to report to the distributing agencies when machines are not used for a certain length of time. This is an important service, for unused machines must be transferred, and there is no other check on their use. Co-operation between the agencies distributing machines and the libraries lending Talking Book records should be close indeed.

To what extent the use of sound as a substitute for touch will effect the reading habits and tastes of library patrons is a matter of interest. Already a few variations are shown. The popularity of the drama in the spoken word is in strong contrast to the infinitesimal call for it in braille. The tolerance of dialect and the ready acceptance of the long book in the new medium is also marked. On the other hand, neither religious reading nor poetry have shown any increase in demand. There is always a steady, though moderate call for the former. But poetry, contrary to popular belief, has never filled the hearts and minds of the blind with ecstasy. Not, at least, to any noticeable degree. And it is quite possible that

the new form is not well adapated to any but narrative poetry. Few people wish to read a collection of poems in consecutive order, and thumbing through a book of records to find a desired verse, has its technical difficulties.

We are at present engaged in building up an expensive library of Talking Books. A collection excellently adapted to its purpose should materialize for we have had considerable experience in this matter of book selection for the blind. Over a long period of years we have spent large Congressional appropriations as well as extensive funds collected through money raising campaigns. We have spent quite a goodly percentage of these funds unwisely. On library shelves throughout the country there are many, many volumes whose lack of circulation is a witness to this fact. Our mistakes should be useful to us in this new enterprise if we will but bear them in mind. It is an admitted fact that braille readers and listeners to recorded books have the same tastes as others. Yet the braille volumes that stand idle on the shelves are in almost every instance books that are not in demand in the public libraries. Why give them to the blind? Should not general trends of reading be taken into consideration in selecting their books? The Talking Book collection already includes too many titles which bid fair to remain unread when readers have a wider choice.

The outstanding desire expressed by blind readers is for recreational and timely literature. We have come to realize that their call for such reading is emphasized by their handicap which deprives them of many incidental sources of amusement and information, and so frequently imposes upon them long hours of idleness. They are cut off from all newspaper and magazine reading, from rental libraries, from books of friends and from a thousand and one small pleasures and observations that vision permits.

If the last three years may be taken as a fair indication of the future, we are entering a period of considerable expansion in library service for the blind. It is a time of transition.

While the new medium presents many fresh problems, we nevertheless begin this era with the benefits of a past experience which has taught us the wisdom of certain policies and established the practice of certain techniques. A splendid co-ordinated scheme of service can easily be achieved by American libraries, if librarians are alert to their responsibilities and opportunities. We are fortunate beyond all other countries in our Government appropriations. We are spending an annual grant of $275,000 for reading for adults and an additional $125,000 for books and tangible apparatus for children. The Talking Book as a reading tool has already become indispensable, but the degree to which the Talking Book library service is successful will depend upon the good judgment of those who administer the appropriations granted for the purpose.

What are the objectives to be sought? Among those generally conceded as being desirable the more important are:

A collection of Talking Books admirably suited to meet the needs of the public it serves.

Distribution of Talking Book machines based on the benefits to be derived by the individual from reading rather than on the basis of an economic need.

Greater dissemination of information concerning library resources, including among other things, a complete braille catalogue of all publications from American presses and, if practicable, a recorded list of Talking Book titles.

A central reserve collection where embossed books of limited demand may be deposited.

The revolution in the reading habits of the blind carries a challenge to the library service. Carries a challenge and presents an opportunity. The new medium has already greatly enhanced the value of the service but its fullest benefits will not be conferred upon the public we serve unless wisdom and foresight direct its development.

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Leisure-Time Activities for the Blind

Ralph Vickers Merry, Ed.D.

Those interested in the education and social adjustment of the blind have long realized that the development of a constructive program of leisure-time activities for those without sight constituted one of their major problems. Numerous writers have commented upon the tendency of blind individuals, both young and old, to lapse into listless inactivity when not required to perform some definite task, and have deplored the physical, mental, and moral results of such idleness. Lack of exercise, poor posture, and other conditions resulting from sedentary habits have been, and still are important health problems among the blind. Inaction has also been credited with the development of auto-eroticism and excessive day dreaming. Studies of the phantasies of blind children indicate quite clearly a tendency for them to spend much time in an imaginary world. This shows a need for more satisfying activities in the world of reality, especially in the form of leisure-time occupations.

In the final analysis the degree to which a blind person overcomes his handicap is to be measured not in terms of his absolute achievements, but, rather, by the extent to which he is accepted as an equal by the seeing members of his group. Many individuals who have had little difficulty in overcoming their lack of sight in so far as their personal problems are concerned, have, notwithstanding, experienced serious difficulty in meeting seeing people upon an equal social footing. In no instance, perhaps, is this more apparent than in the various popular leisure-time activities of the day.

It is evident, therefore, that adequate recreational activities for the blind are essential to their physical and mental health and to their social adjustment as well. It is the purpose of

the present article to review briefly what has already been accomplished in this field and to suggest further developments where the need seems apparent. Recreations of a sedentary character will be discussed first followed by those of a more active nature. The socializing value of recreations of both types, also, will be considered.

Reading probably ranks first as a leisure-time occupation for the blind. The invention and development of raised print and the rapid production of embossed books have placed within the reach of finger-readers an abundance of classic and popular literature. In the United States liberal federal subsidies have greatly enlarged the number and variety of books, and regional libraries throughout the country provide rapid and efficient loan service. Numerous magazines and a weekly newspaper also are available either entirely free or at a very low cost.

The more recent development of the Talking Book, embodying the principle of recording books upon phonograph disks, has been a boon to all blind persons, and especially to those who, through age or some other cause, cannot read tactually. WPA funds have made possible the manufacture of Talking Book reproducing machines to be loaned to blind persons unable otherwise to afford them, and the making of Talking Book records is proceeding rapidly under a regular federal subsidy. Already about 150 titles, representing almost all branches of literature, have been recorded.

Closely allied to reading as a leisure occupation for the blind is radio. Since the perception of radio must necessarily be auditory, the blind are at no disadvantage in this field. Organizations for the blind, through securing liberal discounts, and in some instances actually donating receiving sets, have made the use of radio widespread among those without sight. It would be interesting to know how much time per day the average blind person who owns a radio spends in listening in, and what programs are preferred.

The obvious criticism of reading and radio as leisure-time occupations is that they provide no activity for the large

skeletal muscles, and excessive dependence upon them overstimulates the phantasy life. This is especially true if the individual tends to identify himself with the characters in the book or in the radio drama. As to their socializing value, it is, of course, a conversational asset to be well-read or familiar with current radio characters and programs. If the blind person's conversation is limited to these topics, however, he may become a bore.

For many years educators of the blind have assumed that lack of sight was compensated for by increased musical talent, but recent investigations indicate that some possess little or no native musical capacity. It would be better, therefore, if schools and classes for the blind would devote more attention to music as an avocation. Although many blind persons have made a professional success of music, there are undoubtedly those of more limited talents who should pursue it only as an avocation and some who should spend no time on it at all. As a leisure-time activity moderate musical skill is unquestionably highly desirable. Although classed here as a sedentary occupation, it may involve much physical activity, depending upon the instrument played. It provides an opportunity for creative imagination rather than aimless daydreaming, and can serve as a healthy means of emotional expression. The socializing value of music should not be underestimated. Membership in an orchestra or chorus may provide much pleasure and promote real friendships. Frequently the ability of a blind person to play or sing makes an entrée for him into a group of seeing people which would otherwise be impossible.

Many games of various kinds have been adapted for the blind, such as cards, checkers, chess, anagrams, etc. It is, of course, quite easy for blind persons to play these games among themselves, and, theoretically, it should be possible for them also to play them with the seeing, if the specially constructed materials are used. The writer happens to know several instances where persons without sight have participated in such games with seeing friends, though there is some doubt as

to how widespread this practice may be. The necessity of using specially adapted games, and the slowness sometimes resulting from using such adaptations may explain why these leisure-time activities have been less of a socializing influence than might be anticipated.

Although "manual training" probably is of doubtful educational value, the shop activities and industrial arts work carried on in many schools and classes for the blind may have significance from an avocational standpoint. The writer knows of one instance where a professor of music has used his skill in chair-caning and basket-making as a most valuable hobby. It is unfortunate that more avocational emphasis is not generally put upon such work in school, as its possibilities for earning a living often are limited, except in special workshops for the blind. There is no good reason why knitting, crocheting, basketry, weaving, and other such activities cannot serve as hobbies to blind men and women more than they now do.

Since the development of the "talkies," screen drama has taken on a real interest for many blind people. Although films still are designed primarily to be seen rather than to be heard, it is possible to get a fair idea of the content through merely listening to the dialogue. The introduction of music into most of the "talkies" doubtless enhances their recreational value for the blind. The legitimate theater always has attracted many blind persons who derive genuine enjoyment from witnessing both classic and modern stage productions. Numerous plays depend more upon dialogue than upon action or stage effects, and these should have a special appeal to those without sight.

Some blind people profess to enjoy attending athletic games and other forms of entertainment which rely almost wholly upon the creation of visual impressions. It has been suggested that in such cases the blind individual may be gaining pleasure rather from the feeling of normality and the social contacts accompanying such activities than from any appreciation of what is going on.

In turning to the more active types of recreation for the blind we find significantly fewer occupations. First to be considered are the specially adapted sports and games found in most schools and classes for the blind. These include an adaptation of football, special types of track and field events, swimming and skating. There are also various kinds of formal gymnastics which are given much prominence in some schools for the blind. Although these activities certainly improve the physical development and general health of blind children during their school years, many of them are of such a nature that they cannot readily be engaged in as leisure-time activities in adult life. Furthermore, the active competitive games of the seeing: golf, tennis, basketball, etc., are relatively impossible for persons without sight, and thus a valuable means of social contact between blind and seeing is cut off.

Walking is a favorite pastime with many blind persons and, from the standpoint of physical exercise, it certainly is valuable. Dependence upon some seeing person to act as guide has, however, often limited the development of this recreation. In this connection the guide dogs trained by *The Seeing Eye* have been a great boon to many sightless individuals. These dogs make it possible for the blind person to be relatively independent so far as the problem of getting about is concerned, and also may broaden his social contacts with the seeing.

Many blind people are excellent dancers and this form of recreation has significant social possibilities. If given an opportunity, larger numbers of the blind, who are not too awkward, might well engage in this type of social activity.

The dramatic ability of the blind has been demonstrated by the organization of several groups of blind players who have given performances of a high order. Doubtless, special talent is involved here as in music, but those who have such talent certainly should have the opportunity to develop it along avocational lines, as it is one of the best means by which the blind can forget their handicap.

Gardening and poultry-raising also serve as wholesome recreations to some blind individuals. In fact, the latter may be a real vocation. An attempt has been made to teach the principles of gardening in schools for the blind with what appear to be fairly satisfactory results.

There are, of course, many individually-developed recreations and avocations not included here. Clever and active blind people always have been quick to find something worthwhile to do and their ingenuity often is noteworthy. It would be both interesting and instructive to make a collection of hobbies which blind persons have developed unaided to meet their own particular circumstances.

Obviously, the greatest general need of the blind is more recreational activity of a social nature. This is especially true in the less sedentary types of occupations. The writer believes that nowhere does the handicap of blindness appear so markedly as in this particular field. As has been pointed out, many if not most of the outdoor games and similar active recreations of the seeing are closed to the blind. To make up for this deficiency is a genuine problem in the social adjustment both of blind children and those who lose their sight in later life.

Organizations composed entirely of blind people may offer pleasure and companionship, but probably tend to overstress their common handicap, and hence detract from their ability to mix with the seeing. Other groups, such as service clubs, sororities, etc., can and do accomplish much toward promoting better social contacts between blind and seeing. It would indeed be ungrateful to question the sincerity of such efforts, and nothing could be farther from the writer's intentions. Nevertheless, from the blind person's viewpoint, such activities occasionally give him the feeling that he is an underprivileged child being given a treat at no little trouble and expense. Most self-respecting blind persons do not like to be made the objects of pity nor to feel that seeing individuals are showing an interest in them because the club

or sorority to which they belong has chosen the blind as its "worthy endeavor." If the blind are to derive true social benefit from such contacts, they must not be patronized. On the other side of the question it must be said in fairness that many blind individuals have an unfortunate attitude toward the seeing, and fail to meet them halfway in their efforts to be sociable. Oversensitiveness and a failure to realize that the average physically normal person finds it difficult to understand the meaning of a handicap frequently contribute to this lack of social equality between the seeing and the blind.

From the foregoing brief survey the following suggestions for those concerned with the education and social adjustment of the blind may be derived:

(1) Schools and classes for the blind should make a definite effort to discover and develop new types of active leisure-time occupations which their pupils can pursue *after* leaving school and which might provide some chance for social contact with the seeing.

(2) Less attention probably should be given to formal gymnastics and specially-adapted outdoor games which obviously have little or no social value so long as a basis of necessary physical exercise is maintained.

(3) From the standpoint of mental and emotional health, it would seem advisable to try to prevent both young and old blind individuals from developing those types of recreations which tend to overstimulate phantasy life.

(4) In promoting social contacts between blind and seeing more attention should be given to the attitude of each toward the other. Genuine friendship is the ultimate basis of satisfactory social experience, and true friendship cannot be developed when one individual pities, patronizes, or distrusts and resents the other. A recreational program for the blind which does not constantly look toward their better social adjustment with the seeing is, in the writer's belief, failing to reach the most important goal of leisure-time activities.

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Some Psychological Aspects of the Recreation Problem

Thomas D. Cutsforth, Ph.D.

The problem of providing the blind with adequate recreational facilities has been recognized ever since organized society has become interested in their welfare. In the education of the blind, it is considered second in importance only to the development of vocational techniques. Much of the work of social agencies, both public and private, is concerned with recreation, and relatives and friends of the blind constantly endeavor to provide amusements, diversions and recreation. Unquestionably, there is a real need that many varieties of activity be made available for the use of the blind. To the considerable range of activities now in common use, continued practice and experiment will undoubtedly add many more.

The beginning of a definite interest in the welfare of the blind was a part of that general awakening of social conscience that came in the eighteenth century. All unfortunate or handicapped classes in society were approached with much the same attitude of humanitarian protectiveness. In work for the blind, we have gone a long way in development of methods, in the application of scientific discoveries, in the adaptation to our special problems of the findings of education and social work. But, despite all this development, the fact still remains that the interest in the blind was romantic rather than scientific in its origin, and it may be wise for us occasionally to inspect our own attitudes and convictions, however assured we may feel of their freedom from sentiment and from any lingering romantic aspects from the past.

Speaking in general, we agree among ourselves, and with older workers in the field, that recreational activity is vitally

necessary in the life of the blind, but we may not agree at all as to why it is necessary, or in what particular ways it is of value to the blind. In short, it has always been a sort of shotgun prescription designed to cure most of the minor ills by which the blind are peculiarly afflicted. It is a source of entertainment, a time killer. It diverts the mind from sorrow and disappointment. It keeps the blind busy, it makes them moral, industrious, courageous, companionable and co-operative. It trains their minds, hands and wills, and, above all else, it makes them happy. Putting it briefly, we have in recreation a grand cure-all, a composite potion with a thousand ingredients to cure a thousand specific ills. As society's home remedy for the blind, it has been endorsed and sponsored by all the agencies for the blind, church organizations, educational institutions and fraternal orders.

Far as these objectives may be from our own points of view with reference to the value of recreation, they have led to the recognition of half the problem, the need of the blind for a wide range of activities. How we use these assets now is a function of our own interpretation of the problem, our own redefinition of the need as we find it in the blind. In just the same way, we may carry on the religious practices of our forefathers in nearly the old form, while their significance to us and the use we make of them may be quite different.

It is not the purpose of this paper to consider recreation for the blind, as such. From our point of view, the selection and adaptation of games and sports, handcrafts and other leisure-time activities for the blind is not the most important aspect of the problem. A blind man may be skilled in music and sports, a member of clubs and special interest groups, a good craftsman, and still he may be an unhappy and poorly adjusted individual. Another man, on the other hand, may have achieved satisfying life without making use of these aids. The recreational problem for the blind person is essentially the same as for anyone else. The thing that complicates it for him is that he must at the same time satisfy his own needs, and conform to the necessities that society places upon him by its

definition of blindness. Satisfaction in the life of any human being comes through clarification and ordering of the relations between his personality and his environment. If, as in the case of the blind, the environment includes a redefinition of his personality, he is forced into a very confusing situation. The emphasis upon recreation, as such, as a special necessity for the blind, is just one aspect of that struggle.

Does not our concern that the blind shall be helped and entertained and occupied with useful activities imply our pity for his limitations, and our own compulsion to protect him and provide for him? Does it not imply our concept of the blind person as helpless and unhappy? Are we not, in our emphasis on the recreational problem, trying to quiet our own anxieties about our relations with what it seems to us that the experience of a blind person logically must be?

The same criticism may be applied to our efforts with the blind in many directions. Unintentionally, we have cluttered up the life of the blind with many unnecessary difficulties in our compulsive attempt to help. In our aggressive solicitude, we have unconsciously assumed the responsibility for his adjustment. By so doing, we have relieved the only one who can accomplish that task.

We all accept without question the assumption that life is a web of relationships. From the individual's point of view, the focus of those relationships is the self, and the whole is intelligible and livable for him only as he is able to interpret the constantly changing relationships which constitute himself and his environment. Nature has provided him with but a meager set of equipment to aid him in his adjustment. He is potentially active, constantly responding to some stimuli in some intelligent manner, though perhaps intelligent only to him. It is this very small aperture of activity through which any external influences can be brought to bear on the life of any individual. Such influences are limited not only in extent, but in time as well. The performance of any intelligent activity implies satisfaction as a goal, but satisfaction is neither durable nor cumulative in an ever changing situation. From this there comes the

constant demand for more activity with its concomitant satisfaction, and the nature of the demand is determined by the satisfactions which have gone before, and the maturity that has been achieved in the individual's interpretations. In all phases of his growth, including the recreational, this analogy can be applied: It is not that we need more food for babies now, but that we must have the right kind of food for growing babies right when they need it.

The blind make two general types of interpretations of the demands that society makes upon them. These interpretations are expressed in two general types of reaction patterns. One pattern is a striving to achieve along all lines of endeavor because of, and in spite of, the physical disadvantage. The other pattern is the imposition of the handicap as an insurmountable obstacle between themselves and the desire achievement. Neither attempt is ever completely successful, and the defeat which inevitably results again colors the interpretation. Pathologically considered, one pattern is just as unhealthy as the other. Society commends the one, thus increasing the strain under which the individual lives, and condemns the other, thus adding a feeling of futility and hopelessness to his collection of obstacles. Probably most blind persons combine these attitudes in the pattern by which they live.

Perhaps we could make it possible by a reshifting of our attitudes for the blind to escape some of the tension and defeat they so often suffer. This may be true in the field of vocational adjustment. We are inclined to feel that the problems of life are pretty well settled for the blind person who is economically self-sufficient. He has reached the main goal toward which his training was directed. He has removed himself from the old classification of the blind as social dependents. His time and energies are fully occupied, and he has reached the place where he can consider himself a normal member of society. Do we grasp fully the degree to which progressive achievement complicates the relationships of life and adds increasing demands upon intelligence and adaptability?

Most of the so-called successful blind are not prepared to

live with their jobs, and it is a safe guess that most of them live under greater emotional strain than those economically unadjusted individuals for whose problems we feel so much concern. If a man gets a position for which he has striven hard and long, nine times out of ten, he loses the satisfaction he should derive from it by over-valuing its importance to him. He is likely to express this tension and anxiety in a number of ways. He works too hard at the job and makes it his whole life. He doubts his ability to hold the job and tortures himself with this and that worry concerning it. It happens much too often that his anxieties become the actual cause of his inability to perform the task adequately.

But to recognize the prevalence of this job-conscious anxiety in the blind is only to ask ourselves how this particular aspect of their lives comes to take on so much emotional importance as to endanger its own ends; and why the blind in general lack those social and recreational resources in relation to which their vocational life might fall into its normal perspective. Here again, we need to examine our own attitudes toward the blind. Do we not emphasize the vocational objective, even unwittingly, in our dealings with the blind, to the exclusion of other needs of life? If a blind student shows some ability in music, an average talent, which, in a seeing student, would suggest only an avocational interest, is he not likely to lose the recreational value this might have for him in the compulsion he will soon come to feel that he should make this form of expression yield him a living? But this illustrates only one aspect of the problem. Suppose we consider the case of a boy who is musically gifted, and whose talent is recognized early. The intensive specialized training necessary to develop his gift will probably occupy his time and attention to the exclusion of the social and recreational experience that he needs to mature him and give him perspective, and that will be so essential to him when he finds himself in a position of responsibility.

Many of those who are acquainted with the blind develop an exaggerated concern for the so-called idle time that the

majority appear to suffer through. Undoubtedly such feelings are reconstructed by a sympathetic projecting of ourselves into their situation. Naturally, such idle time would be deplorably depressing for such busy people as we are. It is difficult for us to realize that the most inactive blind person we have ever seen, and we have seen plenty, is just as active as he can possibly be at the stage of adjustment he has reached. If we are convinced that he is suffering from under stimulation, and attempt to fill his life with many kinds of activity of our own choosing, are we not ministering to our own peace of mind rather than to his needs? He may accept our program, and go through the busy round we describe. But what does it mean to him unless the activities he engages in have definite relation to his life as he sees it? If he does not work out his difficulties for himself, he will remain understimulated all his life, regardless of his objective busyness. We can't understand why. We can't understand that we have failed to provide just that little next activity so absolutely essential to the construction of his life's system, but so irrelevant to ours.

We may be approaching an answer to this problem in the growing conviction that the disabling effects of blindness are less important in the physical environment than they are in the field of personality and of social relationships. If this is the case, and we are convinced that it is, we need to approach the problems of the blind in much the same spirit and with much the same techniques with which we approach the social and personality problems of neurotics. The seeing neurotic is surrounded with an abundance of opportunities for activity and social participation, but so long as he feels himself too weak, too ill, too inexperienced or too noble to engage in them, they might as well be nonexistent, or, if he is forced or led into a position where he must attempt participation, his failure and defeat only intensify the old interpretation he has already made of the world's hostility and his own inadequacy. When we say that to lead a blind person out of a condition of lassitude, we must help him to make just that little next step that his development calls for, we mean just

the same thing that the psychotherapist does when he begins at the level of insight that the neurotic has actually reached in his social adjustment, and provides just that experience through which the neurotic can begin to gain confidence in himself, and to interpret his surroundings as less threatening.

We might clarify the problem by contrasting the layman's attitude toward a maladjusted personality with that of the psychiatrist. From the layman's point of view, the trouble is in the patient. He is damaged in certain specific ways, just as a wrecked automobile has certain specific things ruined or destroyed. The patient's will is broken, his courage is missing, his judgment is warped and his morals are somewhat bent. His make-up, or structure, is not what it ought to be. The result is that he performs very badly in comparison to what might be expected if he did not have these defects. To the psychiatrist, the defects are not in the patient; it is not he, nor his potential abilities, that are ailing. The trouble is in the relationship between the patient and his life situation. He is functioning beautifully in relation to his interpretation of the environment, but he is not functioning in relation to the realities of the environment and the demands those realities make upon him.

A balky mule is a good example of a socially maladjusted animal who is exhibiting neurotic behavior. He may be looked upon as having the structural defects that we have mentioned, and, on this basis, we may treat his condition in a variety of ways that will be effective in the immediate situation. We may restore his courage by leading him. We may break his stubborn will with a blacksnake. We may provide him with a burst of enthusiasm by building a fire under him. All three of these activities produce results, and hence are good. They are successful, for we go to town with our load. However, we still have a balky animal on our hands.

Functionally, the balky animal is one for whom pulling a load is not intelligent activity. Without going into the personal and family history of the mule, we can assume that his experiences in such situations have been lacking in satisfaction.

There is a very definite relation between the mule and the load, but it is not one of pulling. And, although we do get to town with the load, we have not made him pull it. He has escaped the fire or run from the whip or responded to the hand on his bridle. He is still a balky animal because these new activities have had no effect upon his former definition of his relation to the load.

If we accept this point of view, it brings us to the problem of the relationship between the fearful or the compulsive blind person and those who are trying to help him to a better social adjustment. It is not enough to recognize a need for recreations and social contacts, to know what are accepted as suitable activities for the blind, to provide them and urge their acceptance. Too often the only real result of such a project is that the blind person finds the greatest threats to his self-confidence in the well meant but over-ambitious efforts in his behalf, and in the person who makes those efforts. After all, the definition of life's relationships has to be made by the person who is living it, and a successful effort to help has to be a very delicate exercise in understanding and co-operation. Social workers for the blind are more likely than teachers to appreciate the need of such an approach to the social problems of the blind, and, if not trained in psychiatric case work, at least to have an appreciation for its point of view. There is a great opportunity for developing the experience and formulating the observation of the case workers under the social security set-up into a pattern of effective methods. It is unfortunate that most of the work under both public and private agencies is done with adults, because it is in childhood that efforts at social adjustment are most needed and most effective.

The value of any recreational activity should be judged in terms of the bearing it has on the objective of personality and social adjustment, and the direction it gives to social growth. When we regard activities in such a light, we find ourselves shifting the emphasis from the immediate situation and the immediate activity, and centering it on the desirability and direction of the step to the next activity. In social growth, as

in plant growth, the buds must precede the branches. How this may occur can be illustrated best by a concrete example.

A blind boy may be asked to join a neighborhood scout troop. His acceptance or rejection of the opportunity will depend largely upon the degree of maturity he has already reached socially, and the manner in which he accepts will be determined in the same way. If he joins, it implies that he anticipates some satisfaction from the activities of the troop and that he has some degree of confidence in his ability to take a creditable part in some, if not all, of its activities. If we watch the boy's reactions, we can soon see from what sources satisfaction is derived. He may enjoy the special consideration he will very likely try to get from the members and master. On the other hand, he may develop a special aptitude for the manual skills required in scouting. He may find satisfaction is his ability to meet the objective standards of physical fitness for promotion. He may enjoy the distinction of being especially zealous with regard to the ideals and aims of the organization. The satisfactions he finds may be distinct and definite or they may be vague and mixed, but whatever they are, they will be of a positive nature. They will continue the trend in which the boy's life pattern has developed, and point the direction of his future social growth.

Since scouting days are but a short episode in a boy's life, the time soon comes when new interests must replace the old if growth is to continue. If left to his own choice, he will seek a new situation in which he can achieve the same satisfaction and excel in the same activities which gave meaning to his scout life. It is during this transition period that counseling is so important, and guidance must be accomplished with caution, finesse and a long look into the future. Would it be wise to give the budding credo zealot the opportunity to become a religious bigot in a young people's Bible class? Why has his growth taken this particular direction? It is because he feels so insecure in the group that idealistic zeal is the only expression of importance he feels able to adopt. What is to be done with the boy who has learned to organize special con-

sideration into a valuable source of satisfaction? Or with the boy who has learned how to bask in the importance of his defect? The boy who has learned to have confidence in his physical fitness and ability will continue to grow in that direction, and will find his place in any physically active group such as a wrestling team, an acrobatic club, or a hiking or swimming club. The boy who finds himself adept at manual skills will not need much encouragement to follow this line of growth. This interest may be a guide toward vocational adjustment, or it may remain a valuable asset for the employment of leisure time. At any rate, wise guidance will help him to use the confidence he has gained in extending his social experience in other directions as well.

There are the same dangers to be avoided in directing the activities of the blind as in directing those of any other class of individuals. It is so easy to allow them to become specialized in some form of expression which chance or special ability dictates, to the exclusion of well-rounded growth. For example, a child who has good oral delivery and a good rote memory enjoys the exercise of these abilities, and is likely to be pushed along, in the direction of oratory or public speaking. If he does not become a senator or a radio announcer, he is certain to be somewhat of a social menace.

When the satisfactions of life have become stabilized on a relatively simple level, so that the individual does not conform to normal standards of performance or participation, the counselor is likely to regard him as understimulated and redouble his efforts to get him to function on the level of acceptable behavior, just as the mule skinner used all kinds of extraneous incentives to get his mule to pull. What we need to realize is that such an individual is incapable of functioning any better than he now does unless he is given a new start and re-educated. He can only respond to the present realities in terms of his old, inadequate definition of some similar situation. He has missed some necessary stage in his growth, and that loss has left its scar. We can call him understimulated because he does not function as we think he should, but we must remember

that the understimulation is not a thing of the present. It is a scar, not a new injury.

It is humanly impossible for any counselor or series of counselors to see clearly enough into the future to foretell what requirements life will impose upon their charges. Inevitably, situations will arise in which the individual is seriously limited because he has missed the early stages of preparation in activities and attitudes in which he might later find real values. It is probably wiser to encourage the individual to develop some aptitude in many activities with specialization here and there than to concentrate exclusively on one or a very few. In relation to personality and social adjustment, recreational activities should aim toward developing a broad base for social contact and participation rather than at developing special skills and techniques in meeting life.

Reading List

Cutsforth, Thomas D. *The Blind in School and Society*. New York, D. Appleton and Co., 1933. 263 pp.

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IX. SOURCES FOR RESEARCH

Special Libraries Relating to the Blind

Helga Lende

THE last hundred years have seen work for the blind emerge from scattered and more or less haphazard experiments by philanthropically-minded individuals to a definite and recognized field in which education, social work, and other professions play their parts. When a new professional field is developed the need always arises for a library where are brought together data of special nature—the various information which the workers in the new field themselves have been instrumental in creating.

Naturally enough, as work for the blind found itself professionally, small library collections dealing with the blind appeared and grew in size as the work itself expanded. In Europe three such libraries developed into representative and interesting repositories of knowledge concerning the blind. The oldest of these is found in Vienna at the *Blindenerziehungsinstitut*, formerly the *Kaiserliche-Königliche Blindenerziehungsinstitut*. Another German library is located at the *Staatliche Blindenanstalt* in Berlin-Steglitz. Last, but not least, mention must be made of the library of the Valentin Haüy Association in Paris.

In America we find one inkprint library on blindness that rivals the European collections in regard to history and tradition, the Reference Library at Perkins Institution and Massachusetts School for the Blind at Watertown. So often libraries serving a special purpose owe their first inception to some leader in the field who also happens to be a book lover. What may be started as a sort of hobby, however, soon proves to

be of value to the profession as a whole. Michael Anagnos, the second director of Perkins Institution, was the enthusiastic founder of the library at Perkins. A visit to Vienna in 1900 gave him his inspiration, and energy and organizing talent did the rest. As early as 1907 there was published a 197-page catalog of the literature in English of the Perkins Special Reference Library on Blindness and the Blind. Mr. Anagnos' successor, Dr. Edward E. Allen, lovingly carried on the work in the spirit in which it was begun, and this was in turn continued by his successor, Dr. Gabriel Farrell. Two supplements to the first catalog were issued—the first in 1916 and the second in 1930. These catalogs are invaluable not only as reference tools, but, due to their notes and book comments, make fascinating reading as well.

The Perkins library was and still is a *reference* library primarily. Only books of which there were duplicate copies might be taken out of their fire-proof home. Thus this treasure house of information was only available to the fortunate few who were able to come to Perkins.

The increasing number of students and workers for the blind, whose work and study kept them in widely, divergent parts of the country, was, however, finding it more and more difficult to obtain the special reading material they needed. True, some of the larger schools for the blind developed library collections for their staffs, notably the Pennsylvania Institution for the Instruction of the Blind and the California School for the Blind, but there was still a need for a special library on the blind which, through a circulating service, could be of use to anyone, irrespective of locality.

A national organization, the American Foundation for the Blind, was the natural place for such a library. The first appropriation for this library, was voted in 1926. In 1929 a trained librarian was engaged. The collection now numbers over seventy-five hundred bound books and pamphlets and includes works in most of the principal languages.

Any fairly large collection of *blindiana* may be divided into two groups. In the first one belong the stories of individual

experiences, more or less fictionalized tales, etc.—"the literature of opinion." This phase of a *blindiana* collection is more of interest to the bibliophile than to the serious student. In the other group we should place the reports of scientific researches dealing with the blind. Such material very often is published only as articles in technical magazines or as monographs from special departments of universities. The Foundation Library, through careful checking with available indexes and abstracts, has made a special effort to keep this part of the collection complete.

The antiquarian value of a *blindiana* collection may at first glance seem unimpressive, since the literature on the subject of the blind does not go farther back than about two hundred years. One need not suppress, however, the affection one feels for an original volume of the *Letter on the Blind* by Denis Diderot, the French encyclopedist, published in 1749, where for the first time we encounter enlightened, if not modern, ideas in regard to the treatment of the blind. The collector may also confess to a special weakness for the *Essay on the Blind* by Valentin Haüy, presented to the King of France in 1784. Going on down the years, one stumbles on writings bearing the names of such pioneers as Johann Wilhelm Klein, Sébastien Guillié, Johann G. Knie, August Zeune, and in America, Samuel Gridley Howe—all literature of an age when the foundation was laid for the progressive, present-day work for the blind.

The Foundation Library is a combined reference and lending library. In the years of its existence, books have been circulated to every state in the Union as well as Canada.

Another library function which may prove more important than the circulation of books is that of reader's advisor, rendered mainly through the distribution of reading lists on special subjects relating to the blind. Most of the seventy-five lists now available were made up on request. The practice has been adopted of printing one list at a time and sending it out to interested organizations and individuals. There is probably a great deal of material on the blind in most public and college

libraries which, however, is not so cataloged or indexed as to be easily located by the research worker. The Foundation Library Reading Lists have made much of this material more readily available to students.

Most special libraries will find themselves playing the part of a clearing house for varied information. Many different kinds of information files and card indexes are therefore necessary parts of the library equipment. In the Foundation Library, for example, such files as complete card catalogs of books for the blind in braille, in Moon type, and on Talking Book records, have been found useful. These files are consulted by printing houses before work is started on any book, so that duplication of titles may be avoided. Also useful are card files of doctors' dissertations and master's theses relating to the blind. Such records help the student to select research subjects which have not been covered before. Detailed information on various obsolete or currently used appliances for the blind will show the inquiring inventor whether or not he has hit upon something really new and useful.

The special library on the blind thus endeavors to do more than merely collect literary and pictorial data, store it safely and catalog it so that it is readily available to all comers. It is trying to "put knowledge to work."

Authors' Who's Who

Robert B. Irwin is a graduate of the Washington State School for the Blind and of the University of Washington and studied at Harvard University Graduate School. For many years connected with educational work with the blind and the partially sighted, Mr. Irwin now is Executive Director of the American Foundation for the Blind.

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Harriet E. Totman is Visiting Teacher in Charge of Braille Classes under the Board of Education, Cleveland, Ohio. Her duties include field work with blind children of preschool age, and she has done a considerable amount of research in the psychology of the preschool child.

Dr. Edward Ellis Allen, who has spent more than forty years in the education of the blind, is Director Emeritus of Perkins Institution and Massachusetts School for the Blind. He was instrumental in the inauguration of the Harvard Course on the Education of the Blind and the Special Methods Course given at Perkins Institution.

Olive S. Peck is Supervisor of Braille and Sight Saving Classes under the Board of Education, Cleveland, Ohio. She has been in charge of special courses for the training of sight saving teachers organized in several cities and at various colleges.

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Beatrice F. Holtzer, a blind graduate of Cornell University, has had considerable experience as a home teacher and as coach to sightless high school students. She is now engaged on a special project in which she is assigned to the Institute of Ophthalmology of Presbyterian Hospital, New York, to help newly-blinded persons make the first adjustment to their handicap.

Calvin S. Glover, Executive Secretary of the Cincinnati Association for the Welfare of the Blind, is a graduate of the New York Institute for the Education of the Blind and of Columbia University. Among the positions formerly held by Mr. Glover are those of Home Teacher for the New York State Commission for the Blind and Executive Secretary of the Buffalo Association for the Blind.

Joseph F. Clunk is Supervisor, Service for the Blind in the United States Office of Education. Blinded by accident at the age of twenty, Mr. Clunk did placement work in Cleveland, Ohio, before accepting the position of Executive Secretary of the Youngstown Society for the Blind. In 1928 he went to Canada where he served as Supervisor of the Industrial Place-

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MacEnnis Moore is Field Representative of the American Foundation for the Blind. His former social work experience includes three years with the Seattle Community Fund, during which time he organized the Volunteer Service Bureau. Mr. Moore is Vice-Chairman of Social Work Publicity Council.

Dr. Helen A. Keller, blind and deaf since the age of nineteen months, is equally famous as an author and as a lecturer. Dr. Keller is Counsellor, Bureau of National and International Relations of the American Foundation for the Blind.

Lewis W. Rodenberg directs the Braille Printing Department of the Illinois School for the Blind, his Alma Mater. Mr. Rodenberg has served on many committees working for the unification of braille and was a member of the American Braille Commission at the conference in London in 1932 where Standard English braille was adopted. Mr. Rodenberg is also an authority of international reputation on braille music notation.

Lucy Armistead Goldthwaite is head of the Library for the Blind of the New York Public Library. She is recognized as a pioneer and leader in this field of library service. In addition to her library duties she is the editor of the *Braille Book Review* and is an American Director of the Moon Society of the National Institute for the Blind, London, England.

Dr. Ralph Vickers Merry, Professor of Secondary Education at Morris Harvey College, Charleston, West Virginia, attended the Montreal School for the Blind, and is a graduate of McGill University. He holds the degree of Doctor of Education from Harvard University and is the author of *Problems in the Education of Visually Handicapped Children.*

Dr. Thomas D. Cutsforth is at present engaged in private practice in the field of psycho-therapy. Blinded by accident at the age of eleven, he is a graduate of the University of

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